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GOVERNMENT OF INDIA

CENTRAL ADVISORY BOARDS OF HEALTH AND EDUCATION

REPORT

ON

BLINDNESS IN INDIA

**By the Joint Committee appointed by the
Central Advisory Board of Health and
the Central Advisory Board of
Education**

1944



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REPORT ON BLINDNESS IN INDIA

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CHAPTER I.—INTRODUCTORY

1. **The Origin of this Inquiry.**—In India, as in other parts of the world, the blind have been familiar members of the community since time immemorial. A few of the Indian blind found slight occupation ; but for the most part they were taken care of under the Indian family system, or were supported by alms. Except rarely, when perverted superstition has made it otherwise, they have been treated with kindness and compassion because of their helplessness, poverty and isolation from so much of the pleasure of life. But this negative assistance, generous as much of it was and is, gives little to the blind beyond the bare fact of existence—a life imprisonment in a dark cell with almost nothing to do with which to fill the unending hours ; little else, indeed, than poverty, dirt and misery.

2. **Its Objectives.**—Fortunately the vast strides in medicine and in mechanical invention have made it possible for the world to relieve in two ways the mass unhappiness and economic loss blindness gives rise to, firstly by reducing tremendously the numbers of men, women and children who lose sight, and secondly by giving opportunities for a full life of usefulness to those whom medicine cannot cure. The task before us is to review the whole Indian situation in the light of existing circumstances and of accumulated knowledge, and to recommend the measures by which these two great alleviators of the miseries of blindness can best be applied in our own field. Some of these measures may not be applicable here for many years—not until the social standards of the mass of the people have made a considerable advance, and their minds educated to a new outlook on such calamities as blindness.

3. The report will set out the full scope of modern blind welfare, and put the next steps of what we might call the “secondary stage” in India in their right perspective. The first stage has been that of the isolated efforts of missions, philanthropic societies and governments scattered over the country, beginning with Miss Sharp’s mission work in Amritsar in 1887, ill supported, struggling but persevering. Throughout the same years modern medicine has made steady headway in its attack upon the heavy incidence of blindness. Admirable as these efforts have been, it is common knowledge among all of us at work in these fields that the existing services are far from adequate, that scarcely more than the fringes have been touched and that we lag far behind most other countries.

4. Quite how to approach what has certainly seemed a heavy task, beset with innumerable difficulties, has not previously been clearly set out. The laying down of a practical policy will be welcomed in many quarters. The Central and the Provincial Governments, for example, have been presented from time to time with requests for financial aid for various purposes affecting the blind—requests whose merits or their true relationship to the whole problem of blindness they find difficult to assess. The philanthropic public, too, is in somewhat the same perplexity—desiring to help the sightless community in a practical way, yet not knowing fully how to go about it. They will welcome the laying down of guiding principles. Those, too, who are working hard to reduce begging in India, realise that the blind beggar must continue to plead for alms until an alternative method of support is available to him. It is proposed in this report to review the problem from both a short and long range view.

5. **Lack of earlier plan.**—Because they are small, widely scattered and financially poor, the existing societies for the blind have been faced by many difficulties, frustrations and the inability to make headway conditions which have given rise to several movements aimed at the creation of national, co-ordinated organisations, on the lines of similar bodies in other countries.

6. For a long time too, many friends of India in England have been anxious to promote the taking of practical measures. In 1931 the National Institute for the Blind, London, set up a special committee on India under the Chairmanship of the late Sir Michael O’Dwyer, G. C. I. E., K. C. S. I. This committee addressed a memorial to the Secretary of State for India, concentrating especially upon the known facts of preventable blindness in India, and expressing the hope that some action might be taken by the Government. The signatories included a former Viceroy, two former governors of Indian Provinces, two former Indian bishops, a former Educational Commissioner with the Government of India and several medical men with experience of ophthalmological work in India. This memorial was referred

by the Secretary of State to Local Governments and Administrations for their consideration. In a subsequent letter the Committee expressed the hope that an Advisory Committee might be set up in India, consisting of persons actively engaged in work for the blind, which would bring together the knowledge and experience of existing organisations for the welfare of the blind and the prevention of blindness. In 1933 the Secretary of State reported to the Committee that almost all Provincial Governments had expressed their inability, owing to financial stringency, to incur expenditure on these measures. We think that these answers indicated an inadequate appreciation of facts and a lack of realisation by the Governments of their responsibility.

7. In 1942 the urgent need for action was stressed in the report of the Uniform Braille Code Committee, in the following recommendations :—

(a) The Central Advisory Boards of Education and Health should jointly consider the problem of the prevention of blindness in this country at an early date.

(b) The Central and Provincial Governments should be urged to promote legislation for the special benefit of blind persons.

(c) For the execution of any planned programme of education in the interests of the blind, accurate statistics are essential and the enumeration of the blind population should be taken up by the Government of India as early as possible, and at any rate not later than the next census.

8. Effect of War.—The outbreak of another world war and the likelihood of considerable numbers of soldiers being blinded also played its part in stimulating interest, not only in the men who give their sight in the service of their country, but also in those who have the misfortune to suffer blindness through disease or accident. In this connection it is of interest to note the following passage in the League of Nations Report on Blindness, 1929 :—“ One of the effects of the Great War was to blind a number of soldiers and sailors, and the hardship involved in the loss of sight by men in the prime of life deeply moved the compassion of peoples of all nations. Organisations for providing for the welfare of these blinded soldiers and sailors sprang into being in many countries, especially in France, Germany and England. One of the first and best known of these is St. Dunstan's, London, founded by Sir Arthur Pearson, himself a blind man. This institution has specialised with success in training blind ex-servicemen from all parts of the British Empire in occupations which they can carry on in their homes or elsewhere. The provision for the welfare of the blind was steadily increasing before the beginning of the Great War, but there is reason to think that the sympathy aroused by war-blinded men has had its reaction on the care of the civilian blind and has done much to stimulate the developments of recent years.”

9. It is probable—in fact already evident—that this war will exert the same influence upon the future of blind welfare work in India. Indeed, those who were associated with the creation of the St. Dunstan's Section of His Excellency the Viceroy's War Purposes Fund (a Section for the training, establishment and after-care of war-blinded men and women), expressed the hope that when war needs had been honourably met, they might turn their energies to the tremendous field of civilian blindness, calling so urgently for wide service.

10. Special Officer Appointed.—In January 1943, in view of all these considerations, the Department of Education, Health and Lands of the Government of India appointed Lieut.-Colonel Sir Clutha Mackenzie (with the co-operation of St. Dunstan's whose representative he is in India) “ as a Special Officer to investigate the extent of blindness in India and its cause and to carry out a survey of the existing societies for the education of the blind children and of the means of employing trained blind men and women in sheltered industries and to prepare a scheme for the creation of a National Organisation for the blind of India.”

11. Sir Clutha was himself totally blinded in action in 1915, and received his training under the late Sir Arthur Pearson at St. Dunstan's. Since then he has been continuously identified with blind welfare work in Britain, the Dominions, India and the U. S. A.

12. It has been his task to collect as much information as possible from whatever sources and from whatever people of experience as were likely to contribute material of value to this report.

13. Questionnaires.—Questionnaires, as given in detail in Appendix A, were sent out to societies for the blind, to social welfare organisations, to Provincial Administrative Medical Officers, to Provincial Inspectors General of Police and to Provincial Directors of Public Instruction. The response was excellent; and this Committee expresses its sincere thanks for the co-operation everyone has given and for the great amount of trouble so many have gone to. The replies received will be referred to in the appropriate sections of this report.

14. Touring and consultations.—Lieut.-Colonel Sir Clutha Mackenzie gave much time to travelling throughout the country to consult Provincial and State Governments, to visit schools, workshops and homes for the blind and societies devoted to the prevention and cure of blindness. The itineraries of these tours are set out in Appendix B.

15. Interim Report.—On April 7th, 1943, at the request of the then Director General, Indian Medical Service, Lieut.-General Sir Gordon Jolly, Sir Clutha submitted an Interim Report to the Department of Education, Health and Lands. It was placed before the Central Advisory Board of Health in New Delhi at its annual meeting on October 4—6, 1943. Sir Gordon Jolly appended a memorandum in the course of which he said, "The problem of the blind in India is a subject that might well have engaged the attention of the Central Advisory Board of Health earlier. If the definition of blindness is widened so as to include all persons who are 'so blind as to be unable to perform any work for which eye sight is essential' the figure for the number of blind in India has been estimated as somewhere between one and two millions. It is therefore evident that here exists an immense field for the amelioration of suffering and of poverty and for turning helpless dependents into socially useful citizens and an economic asset to the community."

16. At the same time a letter dated 28th December, 1942, was submitted from the Secretary, Central Advisory Board of Education, containing a recommendation from that Board that the Central Advisory Boards of Health and Education should jointly consider the problem of the prevention of blindness in the country at an early date.

17. Consideration by Central Advisory Board of Health.—The new Director General, Indian Medical Service, Lieut.-General J. B. Hance, speaking at this meeting said (extract from the report of the Board's proceedings) ".....it was very necessary to have clear ideas on the cause or causes of the disability which it was hoped to prevent. India possessed ophthalmologists unsurpassed in experience and devotion, with a large store of accumulated knowledge on the causation of blindness. However, their experience was confined to the local areas in which their activities had lain and there was no comprehensive review affecting the vast country as a whole. Something more comprehensive was required, because such a review was not only essential but overdue. It was therefore suggested that we should have a committee of educationists and medical men who could consider the various problems—namely medical, educational and rehabilitation. He felt sure that their report would be of very great value to Provincial Governments and Health Departments in formulating their own approach to the task of preventing blindness in India. On the question of treatment and rehabilitation of the actual blind very little had been done except through the efforts of private uncoordinated enterprise and perhaps in some cases to the enterprise of those who had themselves lost their sight. He agreed with Sir Clutha Mackenzie when he said that the time was ripe for giving the blind wider and better welfare services and an improved position in the community. Although the number of men who had become blind in the present war was up to now happily considerably smaller than in the last great war, such cases had occurred and were occurring and this imposed upon both Government and the public a duty of doing everything that modern knowledge and skill could do to compensate them for the sacrifice of their sight in their country's cause. He sincerely hoped that the report when completed would be of great assistance to all the Provincial Governments

and he had no hesitation in recommending to the Board the acceptance of the resolution which was placed before them."

18. Decision to set up a Special Joint Committee on Blindness.—After discussion, in which the members expressed their keen support of the proposal to set up a Special Joint Committee, the following resolution was recorded :—

"The Central Advisory Board of Health notes the wish of the Central Advisory Board of Education that a Joint Committee of both Boards should consider the problem of the prevention of blindness. It also notes with appreciation the valuable interim report on Blindness in India by Lieut.-Colonel Sir Clutha Mackenzie and requests the Chairman to appoint a Joint Committee of the Central Advisory Boards of Health and Education to examine the subject with special reference to the causes and prevention of blindness in India and to Sir Clutha Mackenzie's recommendations and their practicability. The Joint Committee should report to the two parent Boards."

19. Appointment of a Special Joint Committee of the Central Advisory Boards of Health and Education to enquire into Blindness in India.—The Hon'ble Member for Education, Health and Lands, Sir Jogendra Singh, later in the year appointed a Special Joint Committee on Blindness to carry out the task assigned to it. It consisted of seven members nominated by the Central Advisory Board of Education and seven by the Central Advisory Board of Health. These two groups resolved themselves into two Sub-Committees, the Education Sub-Committee and the Medical Sub-Committee, for purposes of discussing the technical details of their respective fields, meeting as the Joint Committee to deliberate on problems of interest to both and to agree upon the text of the final report.

20. Education Members.—The original members nominated by the Advisory Board of Education were :—

Mr. John Sargent, C. I. E., Educational Adviser to the Government of India.

Mrs. Ray, B.Sc. (Econ.) London.

Mr. A. S. Khan, I. E. S., D. P. I., Bihar.

Dr. U. M. Daudpota, M.A., Ph.D., D. P. I., Sind.

Mr. L. G. D'Silva, B.A., M.B.E., D. P. I., Central Provinces.

Mr. W. G. P. Wall, M.Sc., I. E. S., D. P. I., United Provinces.

Mr. Gaganvihari L. Mehta, M.A.

Dr. D. M. Sen, Assistant Educational Adviser to the Government of India, also joined the Committee, while at the second meeting in May, 1944, Mr. W. H. S. Armstrong, D. P. I., Punjab, was nominated to replace Mr. L. G. D'Silva.

21. Medical Members.—The members originally nominated to represent the Central Advisory Board of Health were :—

Lieut.-General J. B. Hance, C. I. E., O. B. E., K. H. S., I. M. S., D. G. I. M. S.

Lieut.-Colonel E. Cotter, C. I. E., I. M. S., Public Health Commissioner with the Government of India.

Lieut.-Colonel E. W. O'G. Kirwan, C. I. E., I. M. S.

Colonel Sir Jamshedji N. Duggan, C. I. E., O. B. E.

Diwan Bahadur Dr. K. Koman Nayar, Superintendent, Government Ophthalmic Hospital, Madras.

Sir Henry Holland, C. I. E., C. M. S. Hospital, Quetta.

Sardar Bahadur Dr. Sohan Singh.

Later Lieut.-Colonel C. A. Bozman, I. M. S., and Lieut.-Colonel D. P. McDonald, I. M. S., were added to the Medical members ; and, when Lieut.-Colonel Kirwan left India soon after the meeting in May, Dr. B. N. Bhaduri, Joint Secretary to the Association for the Prevention of Blindness, Bengal, was nominated to replace him.

22. Chairman and Secretary.—The Hon'ble Sir Jogendra Singh presided as Chairman over meetings of the Joint Committee, or in his absence the chair was taken by Lieut.-General Hance, and at the final meeting by Major-General W. C. Paton, I. M. S., who officiated as D. G. I. M. S., while Lieut.-General Hance was absent on other duties. Lieut.-Colonel Sir Clutha Mackenzie was appointed Secretary to the Committee, while Dr. Sen acted as Secretary to the Education Sub-Committee, and Lieut.-Colonel McDonald to the Medical Sub-Committee.

23. Meetings.—The Joint Committee held its first meeting in New Delhi on February 28th and 29th, 1944, using the report and evidence collected by Sir Clutha Mackenzie as the basis for its deliberations. The second meeting was held in Simla from May 11th to 13th. Owing to the inability of most of the Educational members to attend, this meeting dealt mainly with medical aspects. Dr. Sen and Sir Clutha Mackenzie represented the Education side ; though it was agreed by the meeting that decisions made were only tentative until they were confirmed by the Education Sub-Committee. The third and final meeting took place in Simla from August 28th to 31st, when the Committee agreed upon the substance of this report and upon its recommendations.

24. Attendances at Meetings.—

First meeting :—The Hon'ble Sirdar Sir Jogendra Singh, Chairman.

Lieut.-Colonel Bozman.
Lieut.-Colonel Cotter.
Dr. Daudpota.
Colonel Sir Jamshedji Duggan.
Lieut.-General Hance.
Sir Henry Holland.
Dr. Khan.
Lieut.-Colonel Kirwan.
Lieut.-Colonel Sir Clutha Mackenzie.
Lieut.-Colonel McDonald.
Mr. Mehta.
Diwan Bahadur Dr. Koman Nayar.
Mr. John Sargent.
Dr. Sen.
Sardar Bahadur Dr. Sohan Singh.

Second meeting :—The Hon'ble Sirdar Sir Jogendra Singh.

Lieut.-Colonel Bozman.
Lieut.-Colonel Cotter.
Lieut.-General Hance.
Sir Henry Holland.
Lieut.-Colonel Kirwan.
Lieut.-Colonel Sir Clutha Mackenzie.
Lieut.-Colonel McDonald.
Diwan Bahadur Dr. Koman Nayar.
Dr. Sen.
Sardar Bahadur Dr. Sohan Singh.

Third meeting :—Major-General Paton.

Mr. Armstrong.
Dr. Bhaduri.
Lieut.-Colonel Bozman.
Lieut.-Colonel Cotter.
Colonel Sir Jamshedji Duggan.
Sir Henry Holland.
Mr. Khan.
Lieut.-Colonel Sir Clutha Mackenzie.
Lieut.-Colonel McDonald.
Diwan Bahadur Dr. Koman Nayar.
Dr. Sen.
Sardar Bahadur Dr. Sohan Singh.
Mr. Wall.

25. The structure of this report falls naturally into its two major and distinct sections : (A) The Extent, Causes, Treatment and Prevention of Blindness ; and (B) The Welfare of the Blind in all its branches. While these two fields are so essentially different in their nature, everyone will realise—and this the Committee wishes to emphasise—that the greater the extent and efficiency in the prevention field, the fewer will be the blind people for whom education, employment and other welfare services will have to be made,

CHAPTER II.—THE HISTORY OF BLIND WELFARE IN THE WEST

1. The League of Nations Report on Blindness, 1929, gives the following excellent summary of the evolution of blind welfare services in Europe and America. We include it in our report because it gives an intelligible background to our own task and shows how similar that task is to the one with which the West has had to wrestle.

2. "The development of a properly planned system of education and welfare on the one hand and of vocational training and employment on the other is of recent date. In olden days, the blind were generally regarded as incapable of participating in the ordinary activities of life, and were left to depend on begging for their existence. The main exception to this was the blind minstrel who is found in the earliest epic of European literature.....

3. **Early Voluntary Efforts.**—"The earliest known institutions for the blind were due to the development of charitable work by the early Christian Church and took the form of homes of refuge. Records exist of the foundation of such homes as far back as the 4th century, when St. Basil established one at Caesarea in Cappadocia.

4. "The earliest public institution established for the blind which still exists is understood to be the Hospice des Quinze Vingts at Paris, founded by Louis IX about 1260. St. Louis the King collected 300 blind persons—Crusaders and others—who, following one of the most characteristic principles of the Middle Ages, formed themselves into a confraternity. Eudes de Montreuil, the King's architect, built them a 'Maison des Pauvres Aveugles'. The inmates, who later included persons of both sexes who had lost their sight from various causes, were encouraged to beg for their living. In the succeeding centuries, numerous other but smaller hospices were established in other countries in Europe, and brotherhoods for the welfare of the blind were founded in many cities. These formed the earliest voluntary agencies for the welfare of the blind in their homes.

5. **The beginning of Schools.**—"Up to the 16th century little or no attempt was made to impart instruction to the blind, but the Renaissance, which gave so powerful a stimulus to education in Europe, aroused interest in the problem of finding some means of educating blind children. For a long time this took the form of individual tuition, and it was not until 1784 that the first school specifically for the blind—the Institut National des Jeunes Aveugles—was opened in Paris. Its founder, Valentin Haüy, one of the most honoured names in the history of blind welfare, began with only one pupil, but the success that attended his efforts soon attracted attention. In 1786 he gave an exhibition of the attainments of his twenty-four pupils before the King at Versailles and, in 1791 during the French Revolution, his school was taken over by the State and has since continued to be a public institution. In 1791 the first institution of the kind in England was established at Liverpool by Edward Rushton, who had lost his own sight during a voyage tending a cargo of negro slaves who were stricken with malignant ophthalmia. It was speedily followed by the Blind Asylum at Edinburgh, the School at Bristol in 1793, the St. George's School in London in 1799, and by other institutions for the blind in various parts of Great Britain. Special schools were also rapidly established in many of the capitals of Europe. The impetus towards providing education for the blind was not long in reaching the United States of America, and, in 1832 the Perkins Institution and Massachusetts School for the Blind was opened in Boston and another school in New York City. These were the first of a long line of charitable endeavour for the education of the blind in Europe and America.

6. **The start of workshops.**—"The founders of these schools aimed at providing education and training which they hoped would enable blind pupils to pass out of the school and earn their own living. Insurmountable difficulties, however, were experienced in placing the pupils after training, and the schools found themselves forced, by the logic of events, to go a step further and provide workshops for the employment of their old pupils. The earliest workshops were formed as adjuncts to schools, and it was not till later that workshops for the blind were established as independent units. In course of time, facilities for training and employment were extended to adult persons who had either never had the advantage of special education in childhood or had lost their sight later in life. -

7. "The 19th century was pre-eminently the period in which the great institutions for the welfare of the blind were established. By the end of the century, the welfare of such of the blind as could obtain admission to these institutions had been established on a satisfactory basis, but the care of the much larger number outside the institutions left much to be desired. At the same time, a start had been made in this direction. Louis Braille, a Frenchman, had completed his invention of a satisfactory system of raised print in 1829 and, though his system did not come into general use till thirty or forty years later, after his death, the various other systems of raised print had made it possible for the blind to read in their own homes. Associations were formed for teaching the blind to read in their homes, one of the earliest being the Indigent Blind Visiting Society, which was founded in 1834 in Great Britain. Dr. Moon, the inventor of the Moon type, was much interested in developing such associations both in England and Scotland, and he founded the first home-teaching society in the United States of America. As these societies developed, the teaching of home industries and the general welfare of the blind, outside institutions, became integral parts of their work. The most significant development in Great Britain in the 20th century has been the growth of these outdoor societies, which was powerfully stimulated by the aid of Government grants and the passing of the Blind Persons Act 1920, which imposed on Local Authorities the duty of providing for the welfare of the blind in their areas. As a result, the whole country is covered with a network of societies so that, wherever a blind person lives, there is some specific organisation responsible for his welfare. The significance of this development lies in the fact that it secures the care of every blind person. The institutional system alone, while providing most admirable care for those who enter its gates, cannot hope to cover the whole of the ground.....

8. **The entry of Governments and Public Bodies.**—"The developments hitherto described were carried out almost entirely by voluntary effort, but at the same time Governmental action was increasing. This growth of activity by Government is the most important and significant development of recent years in many States, but in its early stages the growth was very slow. With the development of systems of national education, educationists found themselves faced with the training of defectives (including blind) who, owing to their defect, were not capable of profiting by the ordinary methods of teaching. It became necessary either to abandon the idea of universal education for such children or to make special provision for them. With the provision, in the Braille script, of suitable means of imparting instruction to blind children, and with the ground-work of special schools established by voluntary associations in the larger centres of population throughout Europe and in many parts of the United States of America, the way became clear for the inclusion of the education of the blind in the system of national education. In a number of countries, special legislative enactments have been passed setting up special schools for the blind and in some cases the law requires the attendance of all blind children at school.

9. "The provision of special education for blind children is the commonest form of Governmental action for the welfare of the blind and exists in a number of countries, but only in a few countries has any further State action been taken for dealing specifically with the blind. Normally, the adult blind are provided for in the same way as other citizens: for example, if they are indigent they are provided for under the Poor Law; if they are aged, under old-age pension schemes, whether contributory or non-contributory; if they are disabled, under invalidity and disablement insurance; if they become blind as a result of industrial accident, under laws providing for workmen's compensation; if they have other defects (e.g., if they are mental defectives), under State provisions for dealing with such defectives. The acceptance of responsibility by the State for the welfare of the blind, as such, is comparatively rare and, if a generalisation may be attempted, it may be said to be confined to the United States of America and the British Empire. In a number of the United States, State Commissions for the welfare of the blind have been set up and many States grant pensions to blind persons as such. In Great Britain, the Blind Persons Act, 1920, as already stated, imposes on the Local Authorities the definite duty of providing for the welfare of their blind. Old-age pensions are awarded to normal citizens at the age of 70 (or at 65 on a contributory basis), but are awarded to blind persons at the age of

50. In Australia, disability pensions are given to the blind among others, and, in New Zealand, pensions are given to blind persons as such. On the other hand, in many countries which do not make direct provision for the blind as such, the work of voluntary associations for the blind is often encouraged and assisted by the grant of State monies."

* * * * *

10. **More recent developments.**—Since the League of Nations issued this Report in 1929, the trend towards Governmental assumption of and sharing in responsibility for blind welfare has been accelerated in many countries. The Blind Persons Act in Great Britain has been amended and extended, and under its impetus the position of the whole blind community has been further substantially improved. In 1942 the whole position was under review by the Interdepartmental Committee on Social Insurance and Allied Services under the Chairmanship of Sir William Beveridge, with a view to blind welfare being built into the fabric of a wide social security service. Yet, at the same time, it was hoped to preserve to the blind all that was human and good in the old system of 'voluntary effort' which, for over a century and a half, had done so much to give the blind a normal, useful and happy place in society. The evidence submitted to the Committee showed that in 1941 there were 74,324 blind persons registered in England and Wales, and that the expenditure on welfare services amounted to £4,597,812 of which £3,788,812 came from public funds (Government, County and Borough Councils and Local Education Authorities) and £809,000 was contributed by voluntary effort.

11. Reviewing the history of blind welfare as set out in this Chapter, the Committee draws attention to the fact that India is the largest and most important part of the Empire in which State responsibility for the welfare of the blind has not yet been accepted.

12. The 160 years which have passed since Valentin Haüy started that small school in Paris with its solitary pupil, cover what has been a remarkable evolution, in the status of blind people—the change from the days when they lived in beggary, ignorance and misery, to the point where in modern countries every blind person is guaranteed a dignified existence and where all of normal intelligence and health can take up remunerative and useful occupations, as well as having a full range of literary, musical and other social interests to give them a full and happy life. They have become confident, self-respecting members of the community, of which they feel themselves a part, and no longer useless encumbrances.

CHAPTER III.—EXTENT OF BLINDNESS IN INDIA

1. **Doubt as to reliability of census figures.**—The Census of India Report of 1931, Vol. I, Part I, makes the following general commentary on its enumeration of blindness—no enumeration of blindness was made in 1941, so that the figures of 1931 remain the latest statistical survey.

2. "The enumerators were instructed to record the fact for each individual who was found to be blind of both eyes. . . . They were also warned against recording as blind those who suffered from loss of sight in one eye only. . . . In Bengal, blind of both eyes was defined as 'unable to count the fingers of a hand held up at one yard's distance.' These instructions were counsels of perfection and it is not claimed that the figures published in Table IX are as reliable as those published in the other tables of the same volume. The return of infirmities at the Indian census has probably never been satisfactory. Notwithstanding instructions to the contrary, it seems likely. . . . that many who are partially blind are returned as totally blind. . . . The term blind is liable to a diversity of interpretation, and although the instructions are that only those blind in both eyes shall be recorded as such, this is definitely effective only to the extent of excluding from the record persons with one unquestionably sound eye. It is true of course that the bias of one enumerator is apt to be corrected by the bias of another in the opposite direction. . . . Some of the inexplicable fluctuations from census to census, and inconsistencies that appear between provinces, make the accuracy of the figures even of blindness open to impeachment, though the returns of blindness have generally been regarded as comparatively accurate, and it is perhaps significant that the Blind Relief Association found by a count

that the totally blind in Bijapur District in 1920 numbered 260 per 100,000 as against 70 returned at the census of 1911..... The census figures of infirmity are therefore presented subject to the proviso that although they do indicate tendencies on general lines their value is only comparative, as they cannot be taken to represent actual numbers.

3. "The figures of blindness have generally been held by census officers in India to be much the most accurate of the infirmity returns on the ground that there is no particular motive for concealment as this affliction excites neither contempt nor disgust; even so the returns are in some cases open to doubt and in any case concealment is likely in the case of girls of marriageable age. In Ajmer-Merwara and in Madras the incidence in 1921 was heavier on males than on females. This has been reversed in 1931. In Assam the heavier ratio of blindness in the hills has been in the past put down to the insanitary houses of the primitive tribes, but it is found to have increased most in 1931 precisely in those districts where education and sanitation have made the most progress. Again in Bihar and Orissa, the extraordinary fluctuations of the number of the blind, 107 per 100,000 in 1911, 82 in 1921 and 126 in 1931 make the returns suspect."

4. The Census Commissioner was justified in the foregoing expressions of doubt. We would even question his claim that "Although the figures do indicate tendencies on general lines, their value is only comparative, as they cannot be taken to represent actual numbers". What deduction, for instance, can be made from the following table, giving a variation in the ratio of blindness per 100,000 from 229 in 1881 to 121 in 1901 and 172 in 1931?

No. of blind per 100,000 of population—

1931	1921	1911	1901	1891	1881
172	152	142	121	167	229

5. **Blindness probably not increasing.**—As a matter of fact few reliable conclusions can be drawn from these figures. In themselves they reveal an obvious increase in blindness from 1901 onwards, but it is open to question whether this is the case. Similar apparent increases in other countries have been attributed to such factors as a greater willingness on the part of the blind or their relatives to reveal blindness, increasing accuracy on the part of enumerators, or the use of a wider definition as to what degree of defective vision constitutes blindness.

6. Sir Henry Holland says :—"In answer to a query as to whether I have any impression or evidence as to whether the ratio of blindness in India is on the increase or decrease, my reply is that I have no evidence; such evidence is difficult to produce but I have a very distinct impression that the ratio of blindness is on the decrease, and one would expect it to be so for various reasons. First and foremost the masses of our Indian villages and cities are being brought more and more into contact with Western medicine each year. Dispensaries and eye clinics are on the increase. Also the number of vaccinated persons must be steadily on the increase, which means that fewer people each year are losing their sight due to small pox."

7. **Source of accurate figures.**—Finally accurate figures of blindness are seldom obtainable until some monetary assistance becomes payable to the blind. Then, rather than people shrinking from admitting their blindness in government papers, the tendency is for all to register including those with some degree of vision but who qualify under the definition of blindness. In Britain, for example, the increasingly wide State and philanthropic services available under the Blind Persons Act brought about a rapid rise in the number of registered blind from 29,926 in 1919 to 74,324 in 1941, an increase of 148 per cent.

8. If the Indian Census continues to enumerate blindness, the apparent total of blind cases, due to the greater readiness of the people to admit blindness, on account of the growing services to the blind, would be almost certain to show a steady increase for many decades, though in reality the actual number would be growing smaller. This would make it impossible to trace the real change in the blind population or reduction in blindness being achieved by curative and preventive measures.

9. **Census enumeration being abandoned.**—The fact is and the Census Commissioner mentions this—a number of countries are losing faith in the accuracy, and therefore the value, of such returns. In Great Britain the use of the Census return as

a medium for obtaining information in regard to the number of blind persons was last made in the Census of 1911; and, in the preliminary report of the Census for 1921, it was stated that "it was possible to omit the enquiry as to infirmities in view of the generally recognised fact that reliable information upon these subjects cannot be expected in returns made by or on behalf of the individuals afflicted". In the United States, too, the recording of physical disabilities has also been abandoned for the same reasons. In New York State, for example, the State Commission for the Blind collected careful statistics which revealed that the correct number of blind persons in the State was 90 per cent. greater than the number returned in the Census.

10. We may add that the former distinguished Professor of Ophthalmology at the University of Madras, Lieut.-Col. R. E. Wright, I.M.S., expressed the view that the possible error of underestimation of the Indian Census was 100 per cent.

11. **Lt.-Colonel Kirwan's review.**—"According to our present statistics there are today about 5,000,000 persons in the world who are blind, but this figure falls considerably short of the actual number, and it would be more correct to say that the figure is three times as great, so that the true ophthalmic picture, should be represented by twelve to fifteen millions. When it is realised that 50-60 per cent. of this blindness need not have occurred, it is certainly about time that a united effort by all nations should come into existence.

12. "The 1921 census for India showed 152 blind persons per 100,000; the 1931 census showed 172; an increase of 20 per 100,000 over the census figures of 1921. The corresponding figure for England and Wales showed 119. Anyone who is acquainted with the prevalence of blindness in India must realise that these figures are low and necessarily incorrect, as the returns for compilation and application of statistics are inaccurate and unreliable. In the Bombay Presidency, the Blind Relief Association made accurate counts of the blind, and the figure was at least three-fold of the census returns. Also in the United Provinces a similar count was made and it was found that no less than 900 per 100,000 were blind. In Bengal, the Association for the Prevention of Blindness has been working since 1936 on enumerations of the blind in the villages. These enumerations are being carried out by the trained medical officers of the travelling eye dispensaries. The figures for Bengal up to April 1943 show 233.42 per 100,000. If, as it is not unlikely, this sort of error of underestimation in the census reports is general, then it is not unreasonable to suppose that the real number of totally blind in India is more like one and half a millions, than the half million shown in census returns.

13. "These numbers do not include people partially blind from neglected eye diseases. For every totally blind person there are three with more or less damaged vision. Therefore, it is no exaggeration to say that the true ophthalmic picture for India should be represented by one and a half million totally blind, and four and a half million with more or less impaired vision. No one who has not worked in India can form a conception of the enormous amount of preventable and curable blindness laying its shadow over the health, happiness and usefulness of this great country.

14. "In the 1931 census, the fact is corroborated that blindness is essentially a disease of old age. At 30 years of age the proportion of blindness is 95.29 per 100,000; at 50 years it is 340.97; while in old age it has risen to 2,299.30. Women are more affected than men."

15. **Estimate of India's Blind Population.**—Let us now endeavour, from the somewhat limited evidence at our disposal, to arrive at a moderately conservative estimate of the population our task concerns. We have these considerations to go on :—

(a) The 1931 Census gives a ratio of 172 blind persons per 100,000 of the population.

(b) Census returns in other countries have seldom shown more than half the true number of the blind, and in India an even lower proportion has probably been revealed to the census enumerators.

(c) Specific counts in districts in Bengal (600 villages) have shown 233.42 per 100,000; in Bombay, 260; and in the United Provinces, 900.

(d) These figures have been arrived at on a general definition amounting to total blindness ; and we can assume that for every totally blind person there is at least one partially blind, whose sight is so damaged that he cannot earn his living without the special assistance of blind welfare services.

16. We feel justified, therefore, in believing that 250 per 100,000 represents the probable ratio of the totally blind, with a similar ratio of partially blind in need of welfare services, giving a total figure of 500 per 100,000 ; and this proportion, applied to a gross population of 400,000,000 people, gives a blind population of 2,000,000.

17. Registration and Sample Surveys.—Some of the people interested in blind welfare place great stress on Government enumeration of the blind. One of the recommendations of the Uniform Braille Code Committee, 1941, runs, " For the execution of any planned programme . . . accurate statistics are essential and the enumeration . . . should be taken up by the Government as early as possible, and at any rate not later than the next census ". Accurate statistics, yes ; but inaccurate returns have little value.

18. After reviewing the whole of the facts set out in this chapter, our conclusion is that some more practical alternative is advisable. As societies for the blind increase in number and efficiency, it should be possible to carry out registrations of blind people, district by district, as is done in Britain, the U. S. A., Canada, New Zealand, etc. In the meanwhile, our best alternative in India is that Provincial Governments should conduct sample surveys carried out by qualified medical men. It is considered that, to obtain statistics of any real value, not less than ten surveys per Province per year would be required. Valuable counts of the kind, as recorded in this chapter, have been made in Bengal, the United Provinces and Bombay.

19. Method of Registration.—Once a system of blind welfare is established throughout the country, local authorities and voluntary societies, working in concert, usually make it their business to register every blind man, woman and child in their districts, and this should be done in India as soon as the work is advanced enough. Compulsory registration is seldom resorted to ; and better results are achieved if such a task is left to tactful handling by people skilled in blind welfare. In making the registration and keeping it up-to-date, touch is kept with public authorities, eye hospitals, school health officers, eye specialists and social welfare associations of various kinds.

20. Definitions of Blindness.—What is regarded today as the "blind" population (or, as the Americans sometimes term them, the "visually handicapped") includes, of course, not only the "dark" or totally blind, but a number, even more numerous, who have partial vision ranging from mere perception of light and shadowy forms to adequate vision for moving freely in the streets in the normal way. So there arises the difficult question of definition—who is entitled to blind welfare service, state pensions for the blind and so on ? There are innumerable complications—restricted fields of vision, sight which is useful in moderately lit rooms but useless in bright sunlight, and so on. Some countries have set up precise ophthalmological scales to define blindness ; but they have been found unsatisfactory in practice ; and something more elastic and practical has been designed. Here are some of the definitions already established :—

BRITAIN, for adults—" So blind as to be unable to perform any work for which eye sight is essential."

for children—" Too blind to be able to read the ordinary school books used by children."

21. The foregoing practical definition for adults, has the following medical equivalent, converted into medical terms by the Royal Society of Medicine (Section of Ophthalmology). " Where acuity of vision (refractive error being corrected) is below 1/20th of the normal (3/60ths Snellen) a person is usually unable to perform work for which eyesight is essential and is therefore blind. Where acuity is better than 1/10th of the normal (6/60ths Snellen), the presumption is that the person is not blind unless there is some counterbalancing visual condition, as great contraction of the field of vision, marked NYSTAGMUS, etc. The test to be applied is not whether a person is unable to pursue his ordinary occupation or any particular occupation, but whether he is too blind to perform work for which eyesight is essential."

UNITED STATES, for Census—"Include as blind any person who cannot see well enough to read even with the aid of glasses."

GERMANY (Census, 1925)—"A person who, with the help of suitable glasses, cannot find his way in strange places or cannot count outstretched fingers at a distance of one metre."

NEW ZEALAND (for pension on account of blindness).—"A degree of permanent and irremediable visual defect in which the vision in each eye is not greater than 1/60th."

22. In India, as recorded earlier in this chapter, in the 1931 census blindness was defined in Bengal as "unable to count the fingers of a hand held up at one Yard's distance". At this stage of development this is probably the simplest, most practical one to apply; but as blind welfare services grow, it will be found advisable to create precise definitions to decide what children should be educated in schools for the blind, what adults should be entitled to blind welfare services, and who should be entitled to special pensions if and when granted, when probably the definitions worked out in Great Britain, from long experience, will be found to be sound.

SUMMARY AND RECOMMENDATIONS

23. Our conclusions are :—

(a) We estimate the blind population of India to be 2,000,000.

(b) While census enumeration of the blind has limited value in indicating such data as the age incidence of blindness, we agree that the experience in India, as in other countries, is that returns of this kind are inaccurate and unsatisfactory.

(c) We recommend that in the meanwhile provincial governments should arrive at estimates of the blind population by sample surveys carried out by qualified medical men. In these surveys Blind Welfare Workers, as and when available, may profitably be associated.

(d) We recommend that registration of blind persons should be carried out by qualified medical officers in co-operation with Blind Welfare officers and local authorities as soon as this can be done.

(e) We recommend that, in the meantime, for practical purposes the definition of blindness best suited to Indian conditions is that a person is blind who cannot count the fingers of a hand held up at a yard's distance; and that, as more precise definitions become necessary, the British standards should be adopted.

CHAPTER IV.—CAUSES OF BLINDNESS

1. We are all agreed that the incidence of blindness in India is high. We also know that chief among the causes stand the complications of inflammatory diseases of the conjunctiva and cornea, including trachoma, and that other prominent causes include smallpox, venereal diseases, nutritional deficiency, glaucoma and cataract. We are aware, too, that the specific causes vary from province to province, influenced mainly by climate, diet and the living conditions of the people. Blindness reaches its peak in the northern and north-western plains where relentless sun, frequent dust storms and the intensity of the dry "hot weather" heat put the greatest strain on the eye and its mechanism, and where, too, there are innumerable flies to spread infection. The more humid areas of the coast show much less eye trouble. But it is no easy task to marshal these broad generalisations into precise statistics. India is a country of vast distances and great variations. It has had, and still has, a generous quota of outstanding eye men, but for the most part each one has laboured in but one province, and even there they have had always to struggle against time to get through the mass of treatment and operative work queuing up endlessly before them. The hours have not been long enough to let them study and write about the wider subject of blindness throughout all India. They have also been too busy to keep detailed records and to make analyses of causes, ages at which sight is lost, and much other data which would be of value.

2. This Committee wishes to emphasize that, in its opinion, the following should be considered as the order of importance of the major factors in the causation of blindness :—

(1) Inflammatory diseases of the conjunctiva and cornea due, among other causes, to the effects of irritants applied in ignorance to the eye.

- (2) Cataract and glaucoma.
- (3) Malnutrition.
- (4) Venereal diseases.
- (5) Smallpox.
- (6) Pernicious activities of couchers and quacks.
- (7) The ill-effects of bad posture, glare, bad lighting and badly printed books.

3. The opinions of various specialists in eye diseases on the relative importance of some of the factors entering into the causation of blindness are set out below. An interesting light is thrown on the geographical distribution of some of these factors :—

(A) CLIMATIC, ECONOMIC AND GENERAL

4. Lieut.-Colonel Kirwan, "In all countries where there is intense sunlight, great heat, and much dust, a high incidence of blindness will usually be found, unless the population is sufficiently advanced and intelligent to take the necessary precautions. In India, the main cause of the large amount of blindness may be said to be due to the physical conditions of the country itself, the general backwardness and apathy of the population, and the great lack of medical facilities. Blindness is for the most part preventable when the people are sufficiently educated to adopt simple precautions and avail themselves of medical advice even when this involves some trouble and expense. Blindness amongst Europeans in India and intelligent and educated Indians is rare.

5. "The septic conditions of the teeth and gums, present in many inhabitants in the East, is responsible for much eye disease. The prevalence of malaria, dysentery and many other diseases, unknown in Europe, add to the risks the eye must run in tropical climates. Enormous numbers of cataracts, glaucomas, lachrymal obstructions, lid troubles and other conditions requiring operative treatment, are seen in large numbers in the daily round of the surgeon's work."

6. Lieut.-Colonel R. E. Wright, I.M.S., says that social customs, such as the purdah system, determine certain restrictions in connection with food, house to house visitation and the free access of women to light and air. The purdah systems undoubtedly have a direct bearing on the problem. Chronic conjunctival affections, particularly trachoma, are more common amongst purdah women of all classes. Access to efficient medical aid is more difficult under the purdah system but this state of affairs is gradually disappearing as women doctors become available.

7. Sardar Bahadur Dr. Sohan Singh, L.M.S. (U. Pb.), says, "Ignorance plays a most dangerous part in the causation of blindness. It is fully established that incurable blindness is mostly the result of serious complications of sore eyes (conjunctivitis including trachoma). It is also a fact that conjunctivitis in almost all its forms is a contagious disease caused by infection of healthy eyes by discharge from those diseased. It can therefore be prevented if people know where the danger lies and how to avoid it.

8. "Ignorance is also responsible for the second commonest cause of incurable blindness, namely chronic glaucoma progressing to absolute glaucoma. People are under the impression that of the two chief causes of blindness in advanced age, cataract is painless and glaucoma a painful disease. This general impression is unfortunately shared by most of the medical men who do not make a special study of the subject. The result is that, during the early and curable stages of chronic glaucoma, the disease is allowed to advance under the wrong notion that failing sight is due to cataract.

9. "Wrong notions about preservation and improvement of sight are also responsible for producing sore eyes which may result in blindness. Antimony and many other powders, as well as other substances, which are very often irritants, are put in the eyes of all members of a household, including babies, with the same probe or rod which is dipped over and over again in the same pot. Any infection in the eyes of one is thus carried to those of others. Moreover, the irritating and gritty particles are liable to produce burns or scratches on the surface of the cornea which open ways for infection of its deeper parts and give rise to ulcers, opacities, perforations and even total loss of the eye."

10. Diwan Bahadur Dr. K. Koman Nayar, L.R.C.P. & S., D.O.M.S., says "Glare, great heat and a dust-laden atmosphere may go some way towards an increase

in the incidence of blindness. Education and propaganda will help in reducing this to some extent as the people will be able to avail themselves of the necessary simple precautions and advice offered to them. My experience does not go to show that focal sepsis is a major cause of cataract, glaucoma, lachrymal obstruction, etc. The close huddling together of inmates in houses, especially where the purdah system is in vogue, has certainly something to do with the increase in the spread of diseases like chronic conjunctival affections, particularly trachoma. The habit of using the same stick from the common cosmetic pot for the eyes of all children in the household has already been commented upon by Colonel Elliot in his book on Tropical Ophthalmology as a factor in the spread of eye diseases.

11. "The economic condition of the people in this country has certainly something to do with the quality of the diet available to the ordinary villager. There are many who cannot get even a little quota of milk for daily consumption in their own households, even though they may be rearing cattle; they always like to make the most of the dairy products available by selling them rather than allowing their children to consume some portion of it to improve their health."

(B) CATARACT

12. Lieut.-Colonel Kirwan, "In old people, cataract and glaucoma are the special foes that produce blindness. Cataract is commoner in India and in other tropical countries than it is in Europe and America. Again, it is commoner in the Punjab and North West Frontier Province than in Bengal and Madras; this is due to the excessive dry heat and intense glare of these areas in contradistinction to the more humid and less intense heat of Bengal and Madras. It is also an undoubted fact that Europeans who have served in India are more liable to cataract than those of their own class who have not. Intense light, therefore, predisposes to cataract, but in the majority of cases there is a definite focus of long continued sepsis which is most commonly dental or alimentary in origin. A further factor, frequently accompanying the formation of cataract, if not an active etiological one, is deficiency in certain elements of diet, which have not been determined as yet. The majority of peasants in most parts of India are habitually on the verge of a starvation diet and cataract may be one of the ocular complications of a nutritional disease, accentuated by these other predisposing causes."

13. Diwan Bahadur Dr. Koman Nayar, "Cataract is certainly more common in India and in other tropical countries than it is in Europe or America. It is also more common in North India, than in Bengal or Madras. In the Government Ophthalmic Hospital, Madras, we have on an average between 5,000 and 6,000 cataract cases out of an annual total treated of about 35,000—approximately 16 per cent. Taking the figures for the whole of Madras Province, cataract cases work out to about only 2.25 per cent. of the total number of eye diseases treated. It may be mentioned that there is the possibility that many remain in their villages without being able to get to the hospital centres either through poverty, want of help, or fear of operation."

(C) GLAUCOMA

14. Lieut.-Colonel Kirwan, "Like cataract, glaucoma is very common in India, and it is nearly always associated with some form of sepsis such as dental or intestinal intoxication."

15. Sir Henry Holland, "This disease is, in my experience, the most frequent cause of incurable blindness. At Shikarpur in one year, out of 7,000 outpatients we saw 700 cases of glaucoma—most of them absolute—the patient being completely blind."

16. Diwan Bahadur Dr. Koman Nayar, "The figures of the Government Ophthalmic Hospital, Madras, show that glaucoma cases are about 2.0 per cent. of the total number attending, while the figures for the province show only 0.35 per cent. It may be mentioned that a very large number of these cases of glaucoma come in for treatment at a stage when they are almost or wholly blind in both eyes. Some of them think or are told by others that they are cases of early cataract and there is no use resorting to hospitals for treatment until the cataract is mature. Thus many of the early cases are left to deteriorate in vision, which cannot be improved upon in the later stages."

17. Colonel Sir Jamshedji Duggan, "A large number of cases of glaucoma go undiagnosed or are diagnosed as cataract in early stages and allowed to continue till sight is completely lost. An attack of acute glaucoma is sometimes treated as a bilious attack by physicians and the ophthalmic surgeon not consulted. Atropine is often grossly misused by medical advisers, and ignorant people do not hesitate to use atropine drops prescribed for others because this stopped pain in *their* eyes. The practice of using 'surmas' (eye powders) which sometimes contain Belladonna for dilating pupils is also responsible for causing glaucoma. The majority of cases admitted to hospitals are too far advanced to respond to treatment."

(D) EPIDEMIC DROPSY

18. Lieut.-Colonel Kirwan, "In 1930 and the latter half of 1929, a large number of cases of epidemic dropsy or, as it is incorrectly called by the public, beri-beri, occurred in Bengal, affecting children, adults and old people. A very common complication of this disease is epidemic dropsy glaucoma. Many people have lost their sight for ever as a result, but those who submitted to an operation before it was too late, retained their sight. The causation of epidemic dropsy still remains obscure, although Dr. R. B. Lal, in his research work, has done much to suggest that one of the causes of the disease is due to a toxin in impure mustard oil produced by contamination with a seed called 'Argimona Mexicana'. Other factors, such as infected rice and infection of an unknown etiology, however, cannot be eliminated in our present knowledge of the disease. Outbreaks of epidemic dropsy have not occurred in the last five years, but probably due to famine in 1943 and this year, sporadic cases of epidemic dropsy have been reported or are occurring in different parts of Bengal. Whether famine conditions are responsible for these outbreaks of epidemic dropsy has still to be proved."

(E) OPHTHALMIA NEONATORUM

19. Lieut.-Colonel Kirwan, "Blindness in the first five years of life forms the main nucleus of the blind population and an important cause is ophthalmia neonatorum, more popularly known as "babies' sore eyes". Thanks to Crede's prophylactic use of weak nitrate of silver drops put into the babies' eyes immediately after birth, which is now carried out as a routine by all midwives, the incidence of gonorrhoeal ophthalmia has considerably diminished."

20. Sardar Bahadur Dr. Sohan Singh, "Ophthalmia neonatorum is very uncommon in the Punjab. I have seen very few cases in my own practice. In 1942 I made enquiries about its occurrence from the three largest lying-in hospitals in the Punjab, viz., Lady Willingdon Hospital, Lahore, St. Catherine Hospital, Amritsar, and Doctor Brown's Hospital, Ludhiana. The replies received from them were to the effect that it practically never occurred."

21. Diwan Bahadur Dr. Koman Nayar, "Ophthalmia neonatorum is a cause of blindness in the first five years of life. Though midwives passing out of the hospitals are always taught Crede's method of prophylaxis, I wonder how often they put it into practice when they go out on their own; but such cases are becoming rare. In Madras, the number of children who go blind from ophthalmia neonatorum is not as large as from keratomalacia. The number of cases attending this hospital during the last three years gives an average of about 0.15 per cent. only."

22. Colonel Sir Jamshedji Duggan sounds a note of warning, saying that Crede's method is not well observed in some clinics, notably in some of the many private maternity homes opened in Bombay in recent years. As a result, a number of avoidable cases of ophthalmia other than gonococcal are occurring.

(F) KERATOMALACIA

23. Lieut.-Colonel Kirwan, "In the Bengal and Madras Presidencies, keratomalacia stands out pre-eminent as the most important cause of blindness in the first five years of life, and is more important even than ophthalmia neonatorum. This disease again is due to the malnutrition and poverty of the people, and to the lack of fat soluble Vitamin A in the food; therefore, shark or cod liver oil forms the chief method

of prevention and treatment. It is nothing short of marvellous to see an appalling condition of the eyes in young children clear up under its administration."

24. Sardar Bahadur Dr. Sohan Singh, "Keratomalacia is a cause of blindness in the Punjab but is not common. In the case of infants it is seen chiefly amongst those who due to one reason or another are not breast-fed. In older children it occurs as a complication of acute disorders like diarrhoea."

25. Diwan Bahadur Dr. Koman Nayar, "Keratomalacia is responsible for a large number of cases of blindness in early childhood. Our records show a figure of about 0.55 per cent. during the last three years. Poverty of the people and consequent malnutrition due to the poor quality of the food, especially lack of Vitamin A in the food, is responsible."

26. Colonel Sir Jamshedji Duggan, "A large number of cases of keratomalacia occurred in children of the labouring classes, especially the mill workers. The establishment of baby creches in the mill area of Bombay has, however, practically overcome this disease. The pernicious habit of giving 'balioli', an aromatic opium pill, to the infant to put it to sleep till the mother's work is over for the day, has thus been abolished and the incidence of keratomalacia has become greatly reduced. Keratomalacia is also seen amongst adults in Bombay, especially in one particular class of labourers, the sturdy Bhayyas, who usually suffer from xerosis and night blindness because their diet is devoid of essential Vitamins A and D. They live only on chappatis and dal—no butter or ghee in them."

(G) SMALLPOX

27. Lieut.-Colonel Kirwan, "In smallpox the eyes frequently become involved, and this could all be prevented by the rigorous enforcement of proper vaccination and re-vaccination. 'Good vaccination saves more eyes than all the eye hospitals put together', says Lieut.-Colonel R. E. Wright, I.M.S., and it is deplorable that the rules and regulations with regard to efficient vaccination in infancy in India are not being universally enforced. In the first half of the 19th century in Great Britain, 1/2 to 3/4 of the indigent blind who applied for relief had lost their sight from smallpox, and in 1922, a century later, the Departmental Committee on the Causes and Prevention of Blindness could only discover six cases in the blind asylums that could be attributed to smallpox."

28. Diwan Bahadur Dr. Koman Nayar, "Ulceration of the cornea and further complications due to smallpox (in the Government Ophthalmic Hospital, Madras) were noted during the last three years to average only 0.08 per cent. Efficient vaccination in the Madras Presidency has certainly reduced such cases. These epidemics are far more in evidence during certain seasons and certain years."

(H) SYPHILIS

29. Lieut.-Colonel Kirwan, "Syphilis, both acquired and congenital, is responsible for an enormous amount of blindness in a large city like Calcutta, yet little is being done to treat and prevent it. The elimination of syphilis from a community may seem to many an impracticable proposition, but we have the advantage of knowing how, in the majority of cases, the transference of disease takes place, and one has only to study how the fight against this disease is progressing in Great Britain to appreciate what can be done. In 1913 a National Council for Combating Venereal Diseases was formed in London, and has concentrated for the past ten years in securing ample facilities for treatment of those infected and enlightening the public on its prevention. The number of cases fell from 105,000 in 1920 to 74,000 in 1923. In Belgium, the Government provides every doctor with a free supply of specific arsenical preparations, and that is what is wanted in this country, as hospitals cannot afford to purchase large quantities of these expensive preparations."

30. Sir Henry Holland, "My experience has been that syphilis is not a major cause of blindness, where I worked. Syphilis is common in the cities but I find it comparatively rare in the villages. Moreover, since I came to this country I have seen astonishingly few cases of syphilis affecting the eye. Interstitial keratitis which is so common in Europe is very rare in Sind and Baluchistan. I do not think I have seen a case during the past two years. The only comparatively common syphilitic infection of the eye is that of plastic iritis often resulting in occlusion of

the pupils. But on the whole, I would say without fear of contradiction that syphilis is not a common cause of blindness in these areas."

31. Sardar Bahadur Dr. Sohan Singh, "As a cause of blindness, both congenital and acquired, syphilis is responsible for a very small percentage of cases in the Punjab."

32. Diwan Bahadur Dr. Koman Nayar, "Syphilis is responsible for a large number of cases of blindness on account of iridocyclitis, keratitis and diseases of the optic nerve, etc. These cases form 1.1 per cent. of the total number of cases treated in the Government Ophthalmic Hospital, Madras."

(I) TRACHOMA

33. Lieut.-Colonel Kirwan, "Trachoma has, from ancient times, been an important cause of blindness. In Egypt, where the disease is particularly prevalent, the treatment has passed into the hands of the public health worker, who has dealt with it by segregation with excellent results. In this disease, many eyes are lost by the application of too irritant remedies. The comparison between the spread of trachoma in Napoleon's army in Egypt in the early part of the 19th Century, and the absence of any outbreak amongst the British Expeditionary Force in Egypt during the late war, is very remarkable and speaks for itself. Trachoma is rife in Northern India, but in Bengal, it is of interest to note, it is found almost entirely amongst the people from other provinces, and notably among the Marwaris from Rajputana, the Muslims from the N. W. Frontier tribes and the Sikhs from the Punjab."

34. Lieut.-Colonel R. E. Elliot, I.M.S., after long experience in the treatment of trachoma, states that it should never be permitted to cause the slightest diminution in the acuity of a patient's vision if treated from the first. Unfortunately, in India, the patients do not come for proper treatment until the disease is well advanced.

35. Sir Henry Holland, "Trachoma with its complications does cause blindness in quite a number of cases and it is for this reason that the Mobile Dispensary is so important; for by getting cases of trachoma early, complications such as pannus and ulceration of the cornea can be prevented. It is extraordinary that a patient may have chronic trachoma up to twenty years without causing great interference with the vision."

36. Sardar Bahadur Dr. Sohan Singh, "Trachoma is a very common eye disease in the Punjab and due to acute conjunctival and corneal complications is responsible for most of the incurable blindness."

37. Diwan Bahadur Dr. Koman Nayar, "Trachoma is responsible for about 4.35 per cent. of the total number of cases treated in this hospital. Taking the figures for the Madras Presidency, it works out to about 2.9 per cent. of the total number of eye cases treated, some of the districts like Vizagapatam and Godavari showing the largest numbers. It may be mentioned that many cases which are trachoma-like are mistaken for real trachoma even by qualified medical practitioners. We find more trachoma in this province among the Muslim community and a number of these neglected cases cause blindness as a result of corneal ulceration and other complications."

(J) LEPROSY

38. Lieut.-Colonel Kirwan, "In Bengal, ocular involvement in leprosy is about 20 per cent. Largely due to the work of Muir, and his methods of early diagnosis and thereby treatment, this cause of blindness is on the downward grade."

(K) CHOLERA

39. Lieut.-Colonel Kirwan, "Cholera is still very common, and is responsible for a certain number of sightless eyes."

(L) PURULENT CONJUNCTIVITIS

40. Lieut.-Colonel Kirwan, "Purulent conjunctivitis is not such an important factor in causing blindness in Bengal as in the Punjab or northern parts of India."

41. Diwan Bahadur Dr. Koman Nayar, "Purulent conjunctivitis among adults is still seen, though rarely, and its treatment has now become much more satisfactory with the advent of sulphanilamides. The percentage of cases treated in the Government Ophthalmic Hospital, Madras, during the last three years is 0.11."

42. Colonel Sir Jamshedji Duggan, "Purulent conjunctivitis of non-gonococcal origin, or more properly muco-purulent conjunctivitis, is common in the months of May, June and October in Bombay. These are hot months and the disease usually is commoner when heat becomes more oppressive. It is not an important factor in causing blindness; nevertheless, it is well to realise how infection spreads through ignorance and uncleanness in unhealthy and crowded localities. Especially is this so among those already suffering from trachoma. This later disease becomes aggravated through repeated attacks of conjunctivitis; complications occur, aggravating the condition of the sight."

(M) CHARLATANS AND COUCHERS

43. Lieut.-Colonel Kirwan, "Another curse in India is the travelling quack, who applies irritant remedies to the eye and makes the condition far worse. The travelling hakim and kaviraj have a lot to answer for in this connection, as have the "couchers of cataracts" known in Bengal as the 'Mal' and in the Punjab as the 'Rawal'. In the 18th Century in England ambulant eye quacks, including couchers, were common, and toured the country accompanied by all the apparatus of shameless advertisement, including monkeys. Their operations were frequently attended with brilliant immediate but disastrous after-results. They were here today and gone tomorrow, and so were able to escape the consequences of their handiwork."

44. "These charlatans still abound in the villages of India, and in the Eye Infirmary of Calcutta it is a common occurrence to see patients with eyes ruined beyond repair by the work of these rascals. Many of these patients arrive in excruciating agony, and all that can be done to relieve pain is to take out the eye. Like every other occupation in India, couching is hereditary, the principles of the craft being handed down from father to son by word of mouth and by practical instruction. By tradition and ancestral habit the coucher is a wanderer on the face of the earth, and like the gipsy, he carries his wares, such as they are, to the very door of the people's homes. Until crude and violently irritant remedies for conjunctivitis and similar affections cease to be hawked about the bazars of India, and legislation is introduced to deal with the coucher, much preventable blindness will ensue."

45. Some years ago careful investigations made at the Ophthalmic Hospital, Madras, showed that out of 836 persons, whose cataract had been couched, only 176 had retained useful sight. The success return from proper surgical practice, on the other hand, is 90 per cent. and even of the remaining 10 per cent. most derive benefit from the operation.

46. Diwan Bahadur Dr. Koman Nayar, "Irritants applied by quacks and charlatans form another important cause of corneal ulcer and subsequent blindness. Irritant remedies are applied in cases of conjunctivitis, or other acute eye diseases, and also to rouse patients, who are comatose and delirious, as the eye is considered to be the most sensitive part of the body and easy to stimulate. We get 1.6 per cent. of such cases in the Government Ophthalmic Hospital, Madras."

47. "The figures of statistics maintained in the Government Ophthalmic Hospital, Madras, show separately only the cases of couching which have come to us for treatment of the after-effects of the couching. We get 0.14 per cent. of such cases. There are many other cases who come for treatment of the other eye (*i.e.* for cataract) which are usually classified in our statistics for the condition for which they attend, and as such, they do not find a place in the statistics as couching cases, as the couched eye, whether blind or otherwise, is in a quiet condition at the time and does not require any treatment."

48. Colonel Sir Jamshedji Duggan, "The itinerant quack applies 'surmas' (eye powders) to any and every disease of the eye and helps to carry infection from eye to eye. He produces disastrous results from the irritant drugs these 'surmas' may contain. Even today in a city like Bombay the coucher carries on his trade with impunity. The law cannot touch him. The simple-minded and ignorant victim still believes in his magic cure of the cataract, little knowing how disastrous are its consequences. An effective check is absolutely necessary to suspend the activities of these charlatans and quacks and prevent the wanton destruction of eyes."

(N) OTHER CAUSES

49. Among these, of course, may be included a small amount of blindness arising from accidents among industrial and agricultural workers. War injuries and certain infectious diseases, such as measles, must also be numbered among minor contributory causes.

50. Statement showing the number of cases treated and their percentage in the Government Ophthalmic Hospital, Madras, and for the Madras Presidency.

Disease	1941 Total Out- patients	1942 Total Out- patients	1943 Total Out- patients	Percent- age for the Govt. Ophthal- mic Hospital	Percent- age for the Presi- dency(*)
	35,939	30,541	35,485		
Cataract	6,093	5,348	5,325	16.0	2.25
Glaucoma	947	655	736	2.5	0.35
Ophthalmia Neonatorum	92	29	35	0.15	..
Keratomalacia	175	135	190	0.55	..
Smallpox	21	39	32	0.08	..
Syphilis	631	482	348	1.1	..
Trachoma	1,838	1,064	1,645	4.35	2.9
Purulent conjunctivitis	27	36	41	0.11	..
Irritant remedies (charlatans)	366	776	429	1.6	..
Couching	37	31	83	0.14	..

(*) Figures only for the above diseases are recorded for the Presidency.

SUMMARY

51. It is evident from the foregoing that most of the blindness has both its direct and its indirect cause. For example :—

Direct Cause	Indirect Cause
Smallpox	Lack of sufficiently extensive vaccination and re-vaccination.
Keratomalacia	Lack of adequately balanced diet and low living standards.
Ophthalmia neonatorum	Lack of adequately trained midwives.
Purulent conjunctivitis	Ignorance and use of strongly irritant remedies.

52. In fact, this last indirect cause, plus poverty and the attendant low standards of hygiene, sanitation, bad ventilation and malnutrition forms the final major cause.

53. Our attack upon the whole vast incidence of blindness must therefore be two-fold—the medical work of dealing with eye diseases as they occur ; and secondly the vast task of removing the indirect causes.

CHAPTER V.—THE TREATMENT OF EYE DISEASES

1. **The existing position.**—For long decades a fine body of men has given skilled and devoted service to the treatment of eye diseases. In connection with this report, figures supplied by the Administrative Medical Officers show that in British India, eye hospitals, eye wards in general hospitals and accredited organisations are annually treating an average of ten million cases (See Table Appendix C). The number, too, treated by qualified ophthalmologists in private practice must be very large. Nevertheless, a huge field for work remains. Lieut.-Colonel Kirwan estimates that 50 per cent. of present blindness is curable, others place the percentage of curable and preventable blindness at a substantially higher figure.

2. For people of ample means there is no lack of facilities and skilled eye men to treat them. It is with the great mass of poor people, who can afford next to nothing, that we are concerned. For them there are Government eye hospitals, eye wards of Government hospitals in provincial and local centres, mission hospitals, a few travelling eye dispensaries, camp eye hospitals and eye fairs, and such simple treatments as small local dispensaries can give.

3. Our chief and strong recommendation is that, great and efficient as this service is, we urge upon all Governments and upon generous people of wealth the intense need to double and treble it. There is no branch of medical science in which comparatively cheap and speedy treatment yields such quick, satisfactory and lasting results. A few days, a few weeks, in a simple hospital under skilled care; and old people, middle-aged men and women, and children are saved from spending one, two or a score of years in darkness, helplessness and poverty. Whether we study the balance sheet from the angle of true charity to suffering humanity or from that of its economic value to the community, there is no field of work more worth while.

4. The position is, of course, not static. Extension of services is a continuous process. For instance, the following review of the present situation in the United Provinces, furnished by Colonel T. C. Boyd, Inspector General of Civil Hospitals, sets out the lines which development is taking and his recommendations for the future. It presents a somewhat typical picture of the existing stage of eye work in many parts of India—excellent work in limited areas, though far from adequate, expansion in progress and an earnest desire to do more. Some provinces are further advanced, some less so; but everywhere the urgent need, the cry, is the same—more hospitals, more trained men, more facilities for work in the rural areas.

5. "A Short History of the Eye Relief Scheme in the United Provinces since its introduction in 1939.—With a view to affording eye relief to the population in the rural areas, the Government, in July, 1939, asked for proposals to start eye relief work, under the best eye surgeons available. Proposals were submitted to Government in August, 1939, and a sum of Rs. 17,500 was placed at the disposal of the Inspector General of Civil Hospitals. The scheme has since then worked continuously in this province during the cold weather months. A grant is placed annually at the disposal of the Inspector General for distribution among the civil surgeons of the districts where the scheme is in force, for hire of tents or buildings, extra medicines and instruments, extra staff and so on, required for the treatment of village patients suffering from eye diseases.

6. "In addition to the distribution of money to the civil surgeons, grants are also paid to a few private eye hospitals in the province, on a *per capita* basis of Rs. 5 per dieted case and Rs. 3 per non-dieted patient. Wide publicity is given to the scheme amongst the villagers by means of posters, beat of drums and with the help of the local Rural Development staff, sanitary inspectors, vaccinators, child welfare and maternity centres, etc. In the first instance patients from villages are advised to go to the nearest medical officer, who examines them to see if they are fit for operation or treatment at the centres. These medical officers then issue tickets to the patients, if they prove suitable; they are then directed to present the tickets to the civil surgeons or medical officers in charge of the nearest eye centres.

7. "In the four years up to 1943, the scheme was applied in 10, 16, 36 and 11 districts respectively, war conditions compelling a reduction in the final year; and *per capita* grants were made annually to five private hospitals. In 1941-42, cataract cases numbered 3,408 and other cases treated 94,613.

8. "The following eye hospitals exist in the province at the moment :—

	Beds
(a) Mohan Das Eye Hospital, Allahabad	24
(b) Eye Department of the Medical College, Agra	60
(c) Eye Department of the Rmg George's Medical College, Lucknow	42
(d) Eye Hospital, Khairabad, District Sitapur	150
(e) Aligarh Eye Hospital, Aligarh	100
(f) Kalyan Eye Hospital, Khatauli, District Muzaffarnagar	50
(g) Jhijnhak Eye Hospital, Cawnpore	Information about beds not available.

9. "Of these it is desirable that Nos. a, b, c and e, be enlarged and encouraged to take up further eye relief work. A scheme has also been sanctioned for building a new eye hospital at Sitapur, where a large amount of eye relief work is being done under the guidance of the medical officer in charge of the Khairabad Eye Hospital, an institution maintained by the district board. In addition to the above the mission hospitals at Kachawa, in the Mirzapur District, and in the Fatehgarh

District are also doing eye relief work. These mission hospitals have been given grants in the past.

10. "It will, of course, be seen that the work is yet in an embryonic condition, and that the existing machinery is far too limited to make much impression on the problem. It will be as well to outline roughly in what way additions and expansions can be made. Conditions on the eastern side of the province vary a good deal from the west as regards eye diseases. The western climate is dry and dusty, with great glare and intense heat, while in the east there is much less dust and the climate is more humid. Due no doubt largely to these climatic conditions, we find very many more cases of cataract on the western side of the province. The incidence of eye diseases is very marked throughout the province, mostly due (apart from epidemic diseases) to dirt, dust and flies. Avitaminosis and epidemic dropsy are also factors responsible for the prevalence of eye diseases.

11. "The following places seem suitable for further extensive eye work :—

(1) Dehra Dun. The labouring population here has recently been much expanded and is likely to expand further. Plans for a new hospital have already been drawn out.

(2) Saharanpur is another station that must be seriously considered for development as an eye centre.

(3) Meerut is a divisional headquarters station and a certain amount of money has already been spent on renovating the hospital, and plans are ready for further modernisation.

(4) Aligarh. A good deal of money has already been spent here on the erection of a new eye hospital. It is also a university town, and should prove an excellent training ground for eye surgeons.

(5) Agra is the seat of a Medical College, which has recently added a new eye ward under the charge of a professor ; it should also prove an excellent training ground for eye surgeons.

(6) Lucknow also has a medical college and the same remarks apply.

(7) Cawnpore has a big industrial population. A large new hospital will soon be erected there.

(8) Jhansi serves an isolated area of the Province and should also be developed.

(9) Allahabad has already an eye hospital, and would prove a useful centre for training young eye surgeons.

(10) Benares. The hospital has been improved and should be capable of doing a large amount of eye work.

(11) There is one other area in which an eye centre will have to be developed, and the choice lies between Moradabad, Bareilly and Budaun. As Bareilly is under consideration and also has a nursing scheme and in addition is a divisional headquarters station, it would certainly appear to be the best site.

(12) On the far eastern side we have another town—Gorakhpur—in one of the most densely populated areas. The hospital is not a very good one and badly needs modernising. It should, however, be looked upon as a site for eye work.

12. "In establishing travelling eye units, I would suggest that the number to start with should be three—one based on the Agra Medical College, the second on the eye Hospital at Aligarh and the third on the Eye Hospital at Allahabad."

13. Mobile Hospitals, Travelling Dispensaries and Eye Fairs.—There is a consensus of opinion, that *at the present stage*, mobile units are essential to a thorough attack upon eye diseases, and in educating the villager to the proper care of the eye. India is a land of villages ; 88 per cent. of the population are village dwellers. Supporters of the mobile unit contend that, however extensive and efficient the permanent eye hospital may be, the villager is still at the stage where the treatment has to be brought to him. Various factors act against his going to the permanent hospital in the district centre—chiefly that of ignorance, not realising that his complaint may lead to total blindness ; and his acceptance of old-fashioned and harmful village remedies. He delays, too, because it is the season for sowing or harvesting, so he cannot neglect his crops to take himself or his suffering wife or child to the hospital. He has a fear of the city, too, and the sharp ways of city dwellers ; he may not be

able to pay the costs of travel and food ; or, finally to meet the petty bribes which chaprasis and orderlies at the hospitals are apt to demand before the sufferer is allowed to see the doctor.

14. The foregoing view is not shared by the authorities in Madras and Mysore who contend that a widespread system of village dispensaries, acting as out-posts and field agents for the permanent eye hospitals and eye wards of district hospitals, can serve the need better than mobile units. They point out that treatment in proper buildings yields a much higher percentage of satisfactory results.

15. We set out here the views of some of the leading men in eye and health work.

16. **Lieut.-Colonel Kirwan's Views.**—Lieut.-Colonel Kirwan, who has for many years energetically promoted the travelling dispensary activities carried out by the Bengal Association for the Prevention of Blindness, says :—“The Indian patient fails to realise the danger of eye complaints. Even when medical facilities are near at hand, he will often fail to avail himself of them, thus it is not surprising that when he has to travel many miles to a distant dispensary, he stays at home and suffers the consequences of his neglect. The government hospitals and dispensaries may be well attended by patients for various complaints, and may be very popular, but for eye diseases the numbers who will attend constantly and regularly are very small compared with the frequency of disease. Indian people prefer medical facilities brought to their very doors, and many eyes are destroyed by the travelling quack, who visits villages and persuades the trusting patients to submit to his unskilled operations. Until such time as there is a complete system of hospitals and better understanding on the part of the villagers, the work of alleviating or curing the blind and preaching the gospel of prevention would be most efficiently and economically carried out by travelling eye dispensaries.

17. “It is of interest to consider the excellent system of ophthalmic relief established in Egypt, because that country suffered in the same way as India is suffering today, and it shows what far-reaching developments may arise from small beginnings. It was started in 1903, with Sir Ernest Cassel's gift of £41,000. It was decided, as a beginning, to establish a travelling hospital to move round the country districts, remaining six months in each place. A Director of Ophthalmic Hospitals was appointed to superintend this and other methods of relief. The scheme steadily developed, the cost being borne partly by government grants, partly by local taxation, and partly by private contributions. Between 1904 and 1914 no less than sixteen ophthalmic hospitals were opened in various parts of Egypt.”

18. **Colonel T. C. Boyd, Inspector General of Civil Hospitals, United Provinces,** gives the following view :—“There was a proposal, in 1940-41, to expand the eye work in rural areas by means of mobile camps. The Inspector General drew up a scheme based on the work done by the Civil Surgeon, Sitapur, who had successfully carried out eye relief work in 1939-40 by this means. A detailed note of this work was sent to the Rural Development Officer for opinion. He did not agree to the scheme, on the ground that eye relief work should be provided in civil hospitals only, under expert guidance, as the experience of the department was that peripatetic camps gave only indifferent medical aid, and should be avoided at all costs. There is a lot to be said for these objections, and I quite agree that unless they are properly organised and are put in charge of experts with sufficient equipment, they are liable to be attended by very undesirable results. No doubt some of these camps get a good deal of publicity, where a large number of operations are performed in the minimum amount of time ; but I have very grave doubts that if the post-operative results were scientifically tested, they would be found other than disappointing. In my opinion, therefore, it is not until we have properly run camps under experts, that this question of bringing relief to the rural population will be a success. I am convinced that this could and should be done, but only if we have properly systematised and organised travelling units, complete with an eye expert, trained assistants and proper transport arrangements. These units should tour during the cold weather season, over selected routes, and at the same time give instructions to the people regarding prevention of eye diseases and other propaganda work. During the non-touring season, these units should return to their centres and be usefully

occupied in the eye hospitals there. I need hardly say that to turn out medical officers suitable for this work, calls for their being trained at the eye hospitals for at least one to two years before they are sent on tour."

19. Sir Henry Holland's Comments.—Sir Henry Holland, Quetta, who has had a lifetime of practical experience of operational work in both permanent hospitals and temporary field hospitals, states :—"Regarding mobile field hospitals, the doctors in charge should not be operative except in the realm of minor surgery, such as treating trichiasis and pterygium, etc. No cases of cataracts of glaucoma should be treated in this mobile hospital. All such cases which call for operation should be sent to some headquarter hospital where there is a surgeon capable of skilfully operating for such conditions.

20. "The preventive work should be under a board on which there should be representatives of Government, missionary and charitable eye doctors. This is certainly a work in which co-operation is required and would be very beneficial.

21. "There should be mobile eye dispensaries all over India ; but they would be more valuable for direct treatment of eye diseases than for propaganda. In the villages I do not think that so far propaganda has been very successful. What goes in at one ear often comes out at the other. In my view, blind relief associations with mobile hospitals should keep to rural areas, while modern eye hospitals should deal with the work in the cities. It is important that mobile dispensaries should deal chiefly with preventive work in the villages.

22. "The extension of preventive treatment of eye diseases could best be done by a wide All-India Society, represented by Provincial Committees in every province. The work done in each province would be supported partly by philanthropy, partly by mission hospitals, and partly by Government funds. It is most important that agencies working for the blind should be co-ordinated under one executive head, such as the Provincial Committee would be.

23. "I believe that the only method to offset or change the eye treatment and malpractices of Indian hakims and old women of the villages is by demonstrating the great superiority of the results brought about by western methods.

24. "Twenty-four men per province should be specially trained in preventive work, the majority of them non-operative. I believe that the greater interest in operative work is to a large extent influenced by the greater financial reward, and the more spectacular results. This leads to neglect of other eye conditions, such as trachoma, etc., equally in need of treatment. These men should be salaried, with some additional allowances in lieu of fees, and if fees are collected from men of wealth, they should be placed to the credit of the costs of the work. Some of the field units should be entirely non-operative in order to assure thorough treatment of the non-operative cases. Some of the operative work done by amateurs, gaining experience, has been, and is, of a lamentably crude and incompetent kind."

25. Henderson Blind Relief Association, Sind.—Dr. G. Sachanand, Medical Officer, Henderson Blind Relief Association, describes the Association's activities in Sind in the following terms :—"The Association was started by the late Mr. C. G. Henderson, I.C.S., in 1925, when he came as the Collector of Thar Parkar. Two centres are working successfully, one at Mirpurkhas and the other at Bijapur. At Mirpurkhas we have got a travelling eye hospital with what limited equipment the funds permit, and a staff which is not adequate to cope with the large amount of work that turns up at every camp.

26. "Twelve camps are held in nine months of the touring season in five districts of Lower Sind. The programme is pre-arranged and is given good publicity by hand-bills, newspapers and posters. At every centre the camp is open for from seventeen days to one month, according to the population. Thousands of people throng to each camp, and from two to six hundred major operations are performed. Every year we treat about 20,000 cases and do about 5,000 major operations, of which 2,000 are cataracts. Most of this work is done with the co-operation of the public which responds well. They arrange for the free lodging and boarding of patients. The Association provides, in addition to free treatment, free cataract spectacles to those who are poor. The Association is in need of funds, because the present equipment is insufficient, and the staff is also inadequate to do all the work

satisfactorily. It is estimated that the work done is only one third of what is required. If we had money we could bring the remaining two thirds to the centres, by arranging free conveyance for the poor, as on account of poverty most of the people cannot take advantage of the centres. At present we are spending about Rs. 12,000 every year, and if we can get Rs. 12,000 more, I am sure we would be able to do more than twice the amount of work."

27. Short and Long Term Policy.—This Committee recommends that, as a *short-term policy*, in those provinces where local eye work is well established, such work should be further developed, while in those provinces where such development has not taken place, Mobile Units, based upon established ophthalmological centres, should be sent out to selected areas and stationed there, if possible in existing hospitals, for periods of not less than three months at a time. At the same time, as a *long-term policy*, they recommend to all Provincial Governments the establishment of well-equipped ophthalmological departments in all Districts and Sub-Divisional Headquarters.

28. Provincial and State Advisers in Ophthalmology Recommended.—This Committee is of opinion that all ophthalmological work by mobile units, eye camps and other similar activities should be subject to government approval and, with that in view, they recommend that there should be, on the staff of the Administrative Medical Officers of all provinces and States, an experienced Ophthalmological Adviser. Provincial Governments should be advised to introduce legislation providing that, in future, no private ophthalmological hospital should be opened without satisfying certain conditions laid down by the Provincial Government, such conditions to include the right of inspection by the Ophthalmological Adviser.

29. A Criticism of Mass Eye Fairs.—A recent report to Government on the work of eye fairs in its relationship to other facilities for the treatment of eye diseases, discusses frankly the pros and cons of this system and indicates where it can give the best service.

30. "Eye fairs have been doing admirable humanitarian work through public philanthropy and deserve every help, but at the same time they urgently need proper guidance; and whatever financial aid is given, it should be strictly subject to the following considerations. Without doubt the country needs a large amount of eye relief work, but the method should not be detrimental to the scientific and properly conducted hospital system. In certain respects, owing to its intensive propaganda, the eye fair method, which appeals so much to the Indian Villager and the semi-ignorant town-dweller, has already hampered the useful and scientific activities of some of the well known eye hospitals with their splendid record of work, but lacking in the means of propaganda which is open to the eye fairs. While eye fairs have an abundant value in places far away from large centres, they have little value in the big towns.

31. "The experience of ophthalmologist in large centres, who have been dealing with the aftermath of eye fairs, has not been as happy as the fairs have been apt to claim. It is not only the skill of the operator that counts in ophthalmic surgery, but several other factors—pre-operative care, which sometimes takes several days with an average Indian villager whose eye is very often not surgically clean, personal cleanliness of the patient, the surroundings, good nursing, after-care which sometimes requires a much longer period than is given in the fairs. The beauty of eye work lies, not in doing a large amount of work in a spectacular fashion, in a very short time and publishing the figures in the papers at the end of the day, but in doing it in an effective and safe way. Quantity at the expense of quality is not permissible, because an eye operation that once goes wrong can seldom be rectified. The fate of cases which fail is unenviable. That the mere visual examination of a cataract case is not enough, is the experience of every eye surgeon. Often an evidently clean eye, in spite of every care during the operation, and freedom from any operative accident, goes bad, the underlying cause being a latent infection of the lachrymal sac and infective conditions of the buccal and nasal cavities, which are hard to detect in the rush of fairs, leaving aside the bacteriological examination of the conjunctival sac—a routine measure in eye hospitals. For these reasons some governments have not allowed eye fairs within their jurisdiction.

32. "It may be true that the hospitals in large centres are unable to do this mass type of work, but where is the urgency of dealing with a large number of patients, in a spectacular fashion, in an exceedingly short time? The only way in which cataracts can be so rapidly dealt with, is the method of the quick delivery of the lens, which is far from scientific, because it produces a corneal opacity right up to the pupil, which seriously interferes with vision afterwards, and so has not met with the approval of scientific workers in this country and abroad. A good cataract operation is really worth spending all the time necessary for satisfactory results. Proper care is only possible in a well organised hospital. At times, eye hospitals, due to lack of accommodation, have made provision for extra patients by putting cots in tents and on verandahs. Their experience, however, has been that, in spite of pre- and post- operational care being better than at fairs, the end results of the tent and verandah cases were definitely not so good as those of the regular ward patients.

33. "The right place for the activities of eye fairs is the interior of the districts, whence indigent and ignorant sufferers cannot find their way easily to established hospitals. Acting in co-operation with the established eye service, this should be their programme :—

(a) To carry the elementary part of the treatment to the doors of the villagers, which will be so useful.

(b) To arrange for serious cases to come to the hospitals without cost to the patient.

(c) To do intensive propaganda for established methods for the prevention of blindness.

34. "To bring cases to the principal hospitals, means of transport should be placed at the disposal of the outdoor dispensaries. To remove the inability of the present hospitals to admit all cases as they come in, existing accommodation should be increased and additional staff provided."

35. **The Functions of Eye Camps.**—This Committee looks with disfavour on the practice of mass eye camps. In its opinion the functions of such campaigns should be limited to those set out in para. 33 above. If, however, operations are to be performed, they should be done only if the operating surgeon is prepared to give his personal attention to the cases for ten days following operation, or to provide after-treatment by qualified doctors until the wounds are completely healed.

36. **The Work of the Bengal Association for the Relief of Blindness.**—Founded in 1930, this Association has carried out an active and useful service, maintaining a travelling dispensary of a modified Egyptian type in each of the five districts of Bengal. The Association's reports and publications contain much practical information of a current character, including a pamphlet, "Details of a Travelling Eye Dispensary", useful as a work of reference for other areas which contemplate the introduction of similar service. The Association's Report for 1942-43 sets out the annual cost of maintaining a dispensary as Rs. 7,500, including medical officer, assistant medical officer, compounder-dresser, driver and coolie. The initial cost of establishment for each dispensary was estimated in 1943 as Rs. 6,000. Lieut.-Colonel Kirwan considers that no travelling dispensary should be put into operation unless the initial cost and maintenance for five years, a sum of Rs. 43,000 has been guaranteed.

37. A travelling eye dispensary is despatched by the committee for work in a district. Its itinerary and plan of campaign are arranged beforehand by the District Magistrate, Civil Surgeon, Superintendent of Police, Chairman, District Board and the District Health Officer in consultation.

38. The two medical officers of each of these units, who are trained eye doctors, work in the sadar and sub-divisional hospitals where the curative side of ophthalmology is carried out. From there they penetrate into the villages and preach the gospel of prevention of blindness, and make enumerations of the blind. No operative work is done during the week before the medical officers are due to leave the hospital in which they are working.

39. **Blind Relief Association, Bombay.**—Other associations have been constituted to carry out curative and preventive work of which the most extensive is the Blind Relief Association, Bombay, founded in 1919. It aims, primarily, at taking skilled eye treatment to the distant, rural areas but also gives excellent service in

prevention propaganda and in educating blind children. In the course of its Report for the year 1940, it says :—"Owing to the tendency of medical men to collect in large towns, partly because of the amenities afforded by the large centres of population and partly because practice in the smaller towns is not, in most cases, remunerative, the medical profession in Bombay City and large mofussil towns is, in fact, overcrowded. There are no qualified men in small towns and villages; even excluding villages on the mountainous and forest-clad confines of India, there are places from which a visit to a doctor would entail a journey of several days, where there are no roads more pretentious than a footpath through the fields and where no educated person has ever lived."

40. Work in the Villages the Most Urgent Need.—It is admitted in all the evidence before us that the rural areas are the worst served and that their need is the greatest. How best can they be served? Expert opinion believes that service in the villages, whether it be given by travelling dispensaries, by well-equipped field hospitals, (not moving too often), or by permanent village dispensaries, should operate on a planned scheme from a district eye hospital as base. The need for co-operation and planning is stressed by Sir Henry Holland, Lieut.-Colonel Kirwan and others. We are fortunate in having the valuable experience gained by the Ophthalmological Centres in Egypt to guide us in India.

41. It is desirable that some study should be made of the difficulties which intrude between the villager and his taking proper treatment—inability to meet costs of travel, to meet costs of food away from his village, and to wait about until he is in a good enough physical condition for operative treatment; his fears of the city, and so on; and to meet them in the best way possible.

42. Summary and Recommendations.—This Committee recommends, as a short term policy, the institution of mobile units where local eye work is not well established. At the same time they advise, as a long term policy, the establishment of well-equipped ophthalmological departments in all district and sub-divisional headquarters.

43. The Committee recommends that all mobile units and eye camps should be subject to government approval by an experienced Ophthalmological Adviser. Such an Adviser should be on the staff of all Administrative Medical Officers. Provincial Governments should take suitable legal action to ensure that, in future, private ophthalmological hospitals satisfy certain essential conditions.

44. This Committee is not in favour of mass eye camps. If, however, operations are to be performed in such camps, they should be done only if the operating surgeon is prepared to give his personal attention to the cases for ten days following operations, or to provide after-treatment by qualified doctors until the wounds are completely healed.

CHAPTER VI.—THE PREVENTION OF BLINDNESS

1. Two Fields of Prevention.—Prevention of Blindness falls into two distinct categories, namely, (1) the prevention of the diseases which lead to blindness, and (2) the treatment of those persons who have already contracted one or other of such diseases. So far, this report has dealt with only the second of these categories. The far wider and even more vital field of prevention lies in the exclusion of the diseases themselves. Just as skilful work in an eye hospital relieves blind welfare societies of the cost and labour of caring for many blind people throughout their lives, so also does the elimination of the diseases which cause blindness save government and hospitals much expense. Let us then turn to the question of the prevention of these diseases.

2. Improved Living Standard a Vital Factor.—All past and present evidence shows that blindness is a close associate of poverty, ignorance, insanitary living conditions and poor and unbalanced diet. Therefore the incidence of blindness must steadily diminish as the standards of the people advance. We can remove these root causes only in association with the general uplift of the people. Nevertheless, we cannot adopt a negative attitude and wait upon that advance to lessen blindness for us. Our own attack on its causes is our share in the wider war on poverty, ignorance and disease. All efforts by government, by social organisations and by

private individuals, to better social conditions of every kind, are themselves valuable contributions towards a reduction in blindness.

3. Estimate of Preventable Blindness.—Let us make an estimate of preventable blindness. The Census return of 1931 gives a table showing the distribution by age of the 601,370 blind persons enumerated; 84,786 under 21 years of age; 116,003 of 21 years and under 41; and 398,948 of 41 and over. Lieut.-Colonel Kirwan remarks that "Blindness is essentially a disease of old age. At 30 years of age the proportion of blindness is 95·29 per 100,000; and 50 years of age, 340·97; while in old age it has risen to 2,299·30."

4. Not until blind welfare is much further advanced and it has become possible to register the individual blind people, shall we know what is really important namely the precise age at which vision is lost. We can, however, arrive at an approximate estimate on the following basis.

5. Of the 84,786 shown in the Census as blind under the age of 21, the majority live on into subsequent age groups, and have many years of blindness. Similarly, most of the age group 21 to 40 live on into the over 40 group; so that the seemingly, very large group of elderly blind includes not only those who lost their sight after 40, but also the child blind and young adult blind who have grown old.

6. It is not possible to determine exactly the rates of survival for the blind from the first age period of 0-20, through the succeeding periods of 21-40 and 'over 40' respectively. It does not seem correct to assume that the rate of survival of the blind is the same as that of the general population; in fact, it should be less among the former. Even so, in the absence of other more satisfactory rates, male and female survival rates of the life tables for British India, given in the 1931 Census Report, have been taken as the survival rates for the blind. These rates are set out below:—

1941 LIFE TABLES—SURVIVAL RATES

	Male	Female	Combined figures for the two sexes
(1) Proportion of persons in the 0-20 age group surviving through the 21-40 age group	0·69	0·64	0·66
(2) Proportion of persons in the 0-20 age group surviving through the 'over 40' age group	0·50	0·43	0·46
(3) Proportion of the 21-40 age group surviving through the 'over 40' age group	0·72	0·67	0·70

7. It will be seen that the number of the blind who have lost their sight under 21 is approximately $2·16 (1 + 0·46 + 0·70)$ times the number of blind persons shown in the census as being present in that age group. About 70 per cent. of the people who have become blind between 21 and 40 live on into the old age group.

8. In order to estimate the "weight" of blindness on the more exact scale of "blind years", the number of years spent as blind people by the various age groups will have to be calculated. The purpose in view is that of ascertaining the fields where the effort we expend will yield the greatest results. In order to calculate "blind years", it is essential to know the exact numbers of persons who become blind in each of the three age periods. For the first age group, 0-20, this number will include those who were enumerated at the census in that group, as well as those who, on the basis of the survival rates shown above, might be assumed to have lost their sight before 21 and to have passed on to the two succeeding age periods. As regards the age group 21-40, the corresponding figure will consist of those who, among the enumerated, could be identified as having become blind in that age group and others who, having lost their sight in that age group, have passed on to the higher age period. For the last age group, 'over 40', the enumerated figure must be reduced by the numbers representing those who passed on into that group from the two earlier age periods.

9. It is assumed that a child losing his sight from smallpox will endure 40 years of blindness, whereas the average person losing his sight, say, from glaucoma, will be blind for probably not more than 10 years. Thus we arrive at the following table, based on the 1931 census figure of 601,370, deducing from it the age at which sight is lost and the total "blind years" lived by each group.

Estimated number of persons who become blind in each age group (calculated from the 1931 census figures for the blind on the life table survival rates for 1931).

Age group.	Male	Female	Total
0-20	108,668	72,793	181,461
21-40	42,503	57,695	100,198
Over 40	132,630	185,448	318,078
Age unspecified	940	693	1,633
Grand Total			601,370

Age group in which sight is lost	No. in group	Its expectancy of blind years	Total blind years	Percentage to the total blind years	Blindness years on the basis of 2,000,000 blind persons
Under 21	181,461	40	7,258,440	58.3	24,139,700
21-40	100,198	20	2,003,960	16.1	6,664,600
Over 40	318,078	10	3,180,780	25.6	10,578,400
Age unspecified	1,633	..	..	..	..
	601,370	..	12,443,180	100.0	41,382,700

10. Greatest Loss among the Young.—We find, therefore, what is not immediately apparent from the Census figures, that quite 30 per cent. of the blind people in India have lost their sight under the age of 21. (Most of it has been lost in the first five years of life.) Add to this the fact that they are blind for much the longest period; and we find that in "blind years" they suffer 58.3 per cent. of the real sum total of blindness.

11. The Comparative Ease of Prevention.—The tragedy of it is that the four major diseases causing almost the whole of the loss of sight in this younger group—smallpox, keratomalacia, ophthalmia neonatorum and conjunctivitis, (together with the lack of, or errors in, treatment of the last named)—are easily preventable by well-known measures—easy, that is, if the people can be reached, and if they will accept precautionary treatment. Total vaccination will banish smallpox; adequate animal fats in children's diets make keratomalacia impossible; a few drops of weak silver nitrate solution in the eyes of every baby at birth almost exterminate ophthalmia neonatorum; and simple lotions instead of damaging irritants will quickly cure conjunctivitis.

12. Blindness from any of these causes in the west is now an extreme rarity. With their departure from the scene here, two-thirds of our blindness would be gone. In both the remaining groups, about half to two-thirds will yield to steady attack, leaving the measure of blindness in terms of "blind years" (not the incidence, which takes into account only the number of blind people), about 20 per cent. of its present appalling figure. It is a task, not a problem—a question of applying common knowledge.

13. Chief Measures Recommended.—This Committee considers the following to be the most important measures to be undertaken in the prevention of blindness—primary education, general uplift of the people, vaccination, fly control, improved nutrition, control of venereal diseases, maternity care, and research into the causation of cataract, glaucoma and trachoma. They urge that early action should be taken to institute research into the nature and causation of these three diseases, and that the possibility of obtaining grants from the Indian Research Fund Association and perhaps from the Rockefeller Foundation, should be investigated. They further advise that due care should be taken in the selection of the types and papers used in the printing of school text books, that an adequate standard of lighting in school buildings should be ensured; and that simple truths regarding cleanliness and care of the eyes, and the harmful effects of applying any substance to healthy eyes, with the mistaken idea of improvement or preservation of sight, should be included in text books for primary and secondary school classes.

14. The Committee has already indicated that it considers that elementary preventive work should be undertaken by Public Health Inspectors, Health Visitors and School Teachers. They should be given instruction on the hygiene and care of the eye, and be allowed to make up simple lotions and instruct the villagers in their use—remedies such as boric lotion, normal saline and castor oil drops are suggested. It also considers that arrangements are necessary to train special blind welfare personnel, who shall be whole-time employees. It considers that arrangements should be made, at an early date, for instruction to be given to Public Health Instructors, Health Visitors and School Teachers, which instruction should take place at recognised ophthalmological centres. The course of instruction for blind welfare workers in services to the blind, which would be more specialised, would be given at an adequate Blind Welfare Training Centre, and in addition would include a short period at a recognised eye centre to give some knowledge of the ophthalmological side. (See Appendix D.)

15. **Excellent work by Junior Red Cross and other Societies.**—The Junior Red Cross Society has done an especially good piece of work in organising lantern lectures and distributing pamphlets in many parts of India, an activity which came into being in consequence of the interest the National Institute for the Blind in London was taking in blindness in India and a grant of funds it made to the Red Cross. The Society has offered to continue and increase its activities in this sphere, a most valuable offer which should be gratefully accepted. Co-operation between the society and the Indian Council on Blindness, the setting up of which this report will recommend, will be fruitful of wide results.

16. We warmly commend, too, the similar practical service being given by the established associations for the prevention and relief of blindness in Bengal, Sind, Bombay, Delhi, the Central Provinces and elsewhere; and we hope it may be widely extended. The medical profession, missionary societies, the departments of health and public instruction, rural reconstruction workers and others, are, of course, constantly contributing to the spread of knowledge.

17. The best propaganda, as Sir Henry Holland has observed, is the gaining of confidence, by the mass of the people, in modern medicine, through their seeing the results of skilled and careful treatment.

18. **Government Action.**—General headway can be assisted from time to time by the enactment of legislation or the making of regulations. It is questionable whether such action is of much assistance prior to the point at which the people can understand and appreciate it, and it is enforceable. Acts, however, prohibiting couching would be of value now, in helping to bring to an end disharmful hereditary occupation. The Government of the Central Provinces has initiated such an act; and we hope other provinces and states will follow suit. Government action is also urgently needed in strengthening the machinery for vaccination and re-vaccination and in regulating the practice of midwifery.

CHAPTER VII.—RECOMMENDATIONS ASSOCIATED WITH THE PREVENTION AND TREATMENT OF BLINDNESS

In consideration of all we have set out in this report on the causes, treatment and prevention of blindness, we have come to a number of conclusions, most of them, of course, by no means new, but shaped and re-stated to meet present conditions. We include the measures of organisation and administration by which we think they could best be brought about. No doubt here, as elsewhere, governments and peoples will wish to turn their energies in post-war years to the building up of social welfare services, the progress of which has been delayed or neglected. No field can be more readily or productively dealt with than this one of blindness. The following are our recommendations:—

1. **Additional Eye Hospitals.**—There is urgent need throughout India for additional eye hospitals and eye wards to be attached to general hospitals.

2. **Eye Service in Rural Areas.**—There is an equal or greater need for the provision of adequate eye service in the rural areas, and we would recommend that the proved Egyptian plan be taken as a model, though some administrations may prefer to have additional district hospitals with village dispensaries acting as their outposts in sending in hospital cases.

3. Patients' Difficulties.—We would recommend that administrations should take steps to meet the travelling difficulties, costs of food and other embarrassments to poor villagers coming to cities.

4. Eye Fairs.—It is suggested that eye fairs, while there is more room than enough for their excellent service, could increase the value of their contribution by some modification in their method; particularly in the direction of concentrating in the rural areas, where the need is so great, rather than by setting up in the cities where there are already established eye hospitals. The matter of greater pre- and post-operational care than the eye fair system permits has also been mentioned.

The supporters of the eye fairs say that the eye hospitals are far from adequate to deal with the volume of work required; and also that the hospitals are too expensive for the poorest people; and these criticisms are not without their justification. We must admit, however, that in principle the hurried, big-scale eye fair is not a sound practice. It has been justified as an improvisation; and we now recommend to its generous patrons that they should co-operate with a wider rational scheme.

5. Couching.—We commend the action of the Government of the Central Provinces and Berar in framing an act to prohibit couching (given in detail in Appendix E); and we strongly urge the passing of similar acts in other provinces and states.

6. Propaganda.—We urge wider education of the people, through all the known channels, in the care of the eye.

7. Social Progress.—We commend all steps calculated to lead to the social advancement of the people, in full consciousness of the fact that ignorance and the low standard of living form the fundamental reason for the extent of blindness in India.

8. Special-Adviser in Ophthalmology in India and a proposed Organisation.—The reduction of blindness to half or quarter of its present incidence calls for a concentrated effort. To do this, in Chapter XVI (para. 16 to end of chapter), we recommend the setting up, at the Centre, of an Indian Council on Blindness, with two main Committees, one of which will be a Committee for the Prevention and Treatment of, and Research into Blindness. It will also be noted that we recommend the appointment, in the office of the Director General, Indian Medical Service, of an Adviser in Ophthalmology, who will also act as Secretary to this Committee.

9. Provincial and State Committees and Advisers in Ophthalmology.—Similarly, we recommend the establishment of Provincial and State Councils on Blindness, linked up with the Indian Council at the Centre, which in their turn will have their Committees for the Prevention and Treatment of, and Research into Blindness. The task before us requires the appointment by each Provincial Government and by the Governments of the larger Indian States of an Adviser in Ophthalmology, whose duty it will be to lead and maintain the attack upon blindness and eye diseases—preventive measures, treatment, propaganda and so on. It would be the Adviser's work to act as Secretary to his Provincial or State Committee for the Prevention and Treatment of, and Research into Blindness.

10. As health is a provincial subject, the vigour with which these services are extended and applied must depend for action and finance, to a very great extent, on Provincial and State Governments. These Committees, linked with the Indian Council, and with their Governments, will carry the main task of implementing the foregoing recommendations and keeping things moving along.

11. The Committees' functions.—These would be their main functions :—

(a) To carry out vigorous propaganda and education work through all the recognised channels.

(b) To collect funds from the philanthropic public with which to put travelling ophthalmic dispensaries and similar services into operation in districts where they are badly needed.

(c) To negotiate with Governments for the passage of legislation and the taking of other forms of government and municipal action likely to contribute to a reduction in blindness.

12. Merging of existing Societies for the Prevention of Blindness.—It is recommended that the existing voluntary associations for the prevention and relief of blindness should merge into the proposed Indian Council on Blindness and its Provincial and State counterparts.

13. Finance.—To put this policy into effect calls, of course, for considerable expenditure in staff, buildings and equipment, in travelling costs for patients and their maintenance and nursing. In our opinion this should not present too great a difficulty. The cost of preventing a man, woman or child from becoming blind, or of curing him or her of blindness, is extremely small in comparison with the cost to the general public of the life-long maintenance and economic loss of that person's twenty, thirty or fifty years of blindness and dependence. Again, where almost the whole of the staff, the bricks and mortar, food, labour and other expenses are available within India, we cannot see that such services are, in the long run, a cost to the country. They provide an uplifting, humanitarian work to many of India's citizens—a work with vastly productive results. The costs come from the country and go back into it; and everyone is the gainer.

14. The Committee stresses that, in the event of the establishment of hospitals or institutions being proposed by generous private individuals, suitable arrangements should also be provided for their endowment.

15. Co-operation between Ophthalmologists and Blind Welfare Workers.—It is of great importance that schools and societies for blind welfare should receive early notification of new cases of blindness, especially among children and young people up to the age of thirty. In this medical section of the report, we recommend that ophthalmologists and eye hospitals should keep in close touch with blind welfare workers, so that, as far as practicable, new cases, whose useful vision cannot be restored, should be passed on immediately for training. This is a specially important branch of social medicine.

16. A Message to the Public.—We wish to make one other recommendation with all the earnestness at our command. We have said in Recommendation 10 that the attack upon blindness must depend primarily on government action and finance. In a sense this is not the final truth. It is upon the people of the whole country, and particularly its wealthier members, that the ultimate success of this campaign will depend. Many countries, with the common consent of the people, have agreed that governments should bear the main responsibility for all the major social services to the mass of the community—services originally pioneered by private charities and religious orders. Nevertheless, all the best features of voluntary effort are still retained, and form an integral and stimulating part of the whole social system. Governments alone cannot succeed—after all, they are a reflection of the peoples' will. They must have sympathy, willing support and voluntary service from everyone throughout the land. Only with this spirit can we achieve real progress.

CHAPTER VIII.—SOCIAL CONDITIONS OF THE BLIND AND THE PROBLEM OF BEGGING

1. Past Occupations.—Various of the old works of Indian literatures make mention of blind people; but there is no general or exact account of how they lived. Their situation seems to have been much as it was in other countries—regarded as a useless section of the community and dependent upon the charity of their own families or of the alms-giving public. At all times there have been blind people of more than average character and ability who have refused to accept this role and have insisted on finding for themselves some activity to satisfy the hunger of muscles for work and brain for relief from the killing monotony of unending years in a dark prison. Probably these more enterprising souls belonged to those who lost sight in young adulthood, and who therefore already knew some profession or trade. At any rate a small number of them found employment at what already seemed to be regarded as the accepted occupations for the sightless. Chief of these appear to have been tasks associated with temples and mosques. They learnt extensive portions of the religious works by heart and recited them in the sacred precincts and

at religious ceremonies. They played and sang to music in the temples. A few of the more intellectual acquired by ear some knowledge of philosophy, mythology, indigenous medicine and astrology, and taught others these subjects. Some, too, were preachers and others poets. The main occupation for women was the husking and grinding of rice and other grains.

2. A number of other occupations were occasionally followed, though it is difficult to discover to what extent—travelling minstrels, bidi and snuff makers, weavers, sellers of religious books by reciting attractive extracts, rope makers, spinners, stringers of charpoys, masseurs with oil, basket-makers, potters, punkah-pullers, domestic servants, temple servants, fishermen, herdsmen and water carriers.

3. Mr. S. C. Roy, Lighthouse for the Blind, Calcutta, says, "It may sound incredible and a little bit cynical, but so far as my observations go, the societies for the blind have not improved very much the employment situation as it existed under the old Indian social order."

4. **Social Position of Blind Women.**—It is safe to assume that in the past the great bulk of the blind lived as they do today, as dependents and beggars. Their treatment in the home and village varied, and still does, from kindness and care to neglect, harshness and exploitation. The schools for the blind and social welfare societies give this picture as to how blind women and girls are regarded and treated in their homes in various parts of the country.

Blind School, Calcutta . . . "As burdens."

Lighthouse, Calcutta . . . "Generally speaking, the blind girls and women are not treated well in their homes and villages. This is because marriage, which is the most honourable and, practically speaking, the only career for women in this country according to accepted social traditions and conventions, is a very rare experience for them. Besides the extent of their education and employability is much less than even that of blind men. The result is that the parents or relatives of a blind girl have to maintain and protect her throughout her life time."

Kalimpong . . . "They are regarded as a great burden, pitied and not allowed to work, the parents usually saying 'They can't do it, poor things'. I know of one blind woman who as a child was crippled for life through being made to sit all the time. Also, one blind girl died from the effects of being shut up all day alone in a cottage while the family went out to work."

Ranchi . . . "Relatives are mostly unaware of the potential possibility of a blind woman and so they are regarded as useless unless the blind woman is of sufficiently strong character to assert herself."

Patna . . . "Blind girls or women who have the good fortune to have good parents and guardians live comfortably."

Allahabad . . . "Very badly indeed—practically as if they were non-existent."

Lucknow . . . "Not properly treated taken as a whole."

Amritsar Boys . . . "They are regarded as an object of pity."

Dadar School, Bombay . . . "Blind women and girls are treated as a burden by ignorant and poor parents in their own homes and villages."

Happy Home, Bombay . . . "As a helpless being—left alone."

Blind Women's Home, Bombay . . . "Generally they are being treated with kindness and consideration."

Poona . . . "They are cared for by their parents or guardians as equally as the sighted children, the spirit of humanity being keen in Indian people."

Nagpur . . . "Blind women and girls are generally treated very sympathetically in their families."

Poonamallee . . . "They are treated kindly as long as the parents are there in most cases. Through ignorance, in the poorer homes they are not encouraged to help in the home, and invariably in the earlier days if asked about having blind people admitted to school or an institution, the parents would ask, 'But what can the blind do'."

Palamecottah . . . "Everything depends upon the home. In poor homes where the parents may be very ignorant, it is more than probable that blind girls, and boys too for that matter are very much neglected. But even in poor homes some parents seem to act sensibly and encourage their blind children to do as much as possible for themselves. In other homes there is a good deal of very morbid sentiment, and blind children are treated as chronic invalids and not allowed to do the least thing for themselves, or to move about with escort for fear of injury."

Cochin . . . "The blind women and children are generally treated very kindly by the members of their families, particularly in village parts. Their services are as far as possible availed of by the other members of their families."

5. **Sir Henry Holland's Comments.**—Sir Henry Holland speaks in the following terms :—" As far as I can make out, blind people are as a rule kindly treated by their relations, and if they do not beg, they just sit in the house or outside the house and talk and sleep and eat. I have no idea how much an ordinary blind beggar earns by begging, but I am told that they make as much as 16 or 17 rupees a month. I know no case in which a blind person is homeless. I think the chances of a boy or man, having once fallen into the begging habit, of settling down in ordinary routine life are very remote.

6. " Blind women and girls are generally kindly treated in their homes, but one informant has told me that this is by no means always the case. They often help by cleaning cooking utensils and also in washing clothes. They marry only in very exceptional circumstances. I know one Christian blind girl who married. Ordinary orthodox villagers as a rule refuse to send their girls to any institution.

7. " I can remember at least one instance of a blind man born in a wealthy household who became one of the most influential zamindars in his district and was also chairman of the local district board. He was well known in the Upper Sind Province.

8. " A blind child is up to a point an asset to its parents in view of its earning power as a beggar. A simple training for blind girls at domestic work and home management would help both them and their village life."

9. Answering the question " Do blind girls ever marry ? " Out of twenty schools and social welfare societies, thirteen said no, or very seldom ; four replied that they sometimes did, provided they were from good homes or had wealth ; and three said yes.

10. In reply to the enquiry, " Are many homeless ? " sixteen societies answer yes, while three say no, and two give indefinite answers.

11. **Alms giving.**—For many centuries, and still today, begging remains the main occupation and means of support of the majority of the blind of India. It is in essence the " Social Security System " of past centuries. The various religions enjoin upon their followers to give generously of what they have to the poor, the blind, the crippled and the sick, and they will find favour in God's sight.

12. " Kautilya enjoins on a Brahmin, a Kshatriya and a Vaisya to give gifts " says the Mysore Report on Beggary—1943. " To give is right " says Lord Krishna in the Bhagvad Gita. The Quran enjoins Zakat, Fitra Sadaka and Kaffara, the various forms in which a Muslim has to help the poor ; ' and as for him who asks, do not chide him '. This is a Quranic injunction which every devout Muslim follows. Christ enjoins on the people to ' sell that ye have and give alms ' and all through the Bible we find references made by Christ to help the poor and needy. One of the first prayers taught to a Zarathusthrian is ' Yatha ahu Vairyo, ' and day in and day out while chanting that prayer, he utters this line, ' the strength of Ahura is given unto him who unto his poor brothers giveth help '."

13. **Income from Begging.**—Though this system has many abuses, though it is degrading to the dignity of man, yet it has guaranteed the helpless against starvation. The earnings of beggars vary considerably—Rs. 5, 15, 30 a month and even more. To poor parents a small blind child is actually an asset, capable of being hired out to professional beggars for four and five annas a day, or of being taken out by the parents themselves for begging purposes.

14. Schools, social welfare societies and Inspectors General of Police have given us the following information as to the earnings of blind beggars.

Calcutta Blind School .	" Earnings reach a maximum of Rs. 300 a month."
Ranchi	" As much as Rs. 2 a day."
Lucknow	" A rupee a day."
Dadar School, Bombay .	" A rupee a day."
Happy Home, Bombay .	" Rs 20 to Rs. 30 or even more."
Blind Women's Home, Bombay .	" Rs. 3 to Rs. 4 a day ; but the ' dada ' who exploits them, allowing them only 20 per cent of this. Blind children are bought for a very small price and exploited."
Poona	" Rs. 10 to Rs. 15, and a child from Rs. 7 to Rs. 10."
Poonamallee	" Sufficient for food day by day, and the lazy life seems to appeal."
Palamcottah	" Maximum earnings average about Rs. 30 a month."
Cochin	" Only enough to support them and their families."
Y. M. C. A., Calcutta .	" About a rupee a day."

Anjuman-i-Himayat-i-Islam.	"8 annas to Rs. 2 a day."
Moral and Social Hygiene, Delhi.	"In country places the blind are often respected as specially devout, and food and pice are given because it is a religious duty to give in charity to devout people."
The Inspector General of Police, Bihar.	"It is doubtful whether the average blind beggar collects more in a month than is sufficient to keep him or her for that period."
I. G. of Police, N. W. F. P.	"Barely sufficient to provide them with food."
I. G. of Police, Coorg .	"Just enough to keep body and soul together."
Minister of Baroda .	"People regard them as worthy recipients of charity."
Senior Superintendent of Police, Baluchistan.	"The average income of a blind beggar may be roughly estimated to vary between Rs. 2 to Rs. 5 in the town of Quetta, but in other small towns in the province it may decrease to a considerable extent."
Government of Hyderabad.	"There are about 100 blind beggars (male and female) in the city. In the districts out of nearly 14,000 blind persons, 10,506 according to the latest census, earn their living by begging. Out of the total blind beggars there are 5,399 men and 5,197 women."
Inspector General of Police, Punjab.	"Begging by the blind is practised on an extensive scale, usually in the larger cities and at railway stations, and also on the occasion of religious gatherings. Beggars may be divided into the following :— (a) Those who beg independently, i.e., operate by themselves. (b) Those who are maintained by others for the purpose of begging. These are kept in institutions and attract sympathy by posing as paupers. They usually wander round in groups and sing religious songs to the accompaniment of a harmonium. No social stigma is attached to blind people begging. The more educated classes of society feel that the blind should be afforded some type of industrial training and in the absence of this or any other form of employment consider it inevitable that the blind should beg. The charitably disposed will give much more readily to the blind than to other types of beggars and it is a fact that among the begging fraternity the blind beggar has the largest income. It may even be said that the very poor classes who find it impossible to make ends meet, if they must have children would rather that their children were born blind, as they are thereby fairly certain of exciting the sympathy of the charitably disposed. Beggars who are genuinely blind will engage on a percentage basis others of the begging fraternity to lead them from place to place."

15. The Sir Dorabji Tata Graduate School of Social Work, Bombay, says in a report, 1943, "Blindness seems to be the surest passport to the sympathy and purse-strings of the public. The erring, misguided and so-called charitably minded persons dole out their pennies to the blind so readily that they find it much easier and much more profitable to beg than to take to some industry after training and re-education. Neither the public nor the beggar seems to care for the schools or institutions for the blind. These institutions are hardly ever taken advantage of by the congenitally blind beggar and the one who becomes blind in old age.....many bogus beggars pretend to be blind...The ordinary price at which a blind child can be bought is Rs. 5; that of a crippled one is Rs. 3. Some years ago I came across the case of a child which had shells put into its eyes to look like blind."

16. **Evil Effects of Begging.**—The indiscriminate and uncontrolled giving of alms leads to much economic waste. All beggars look the same—ragged, poverty-stricken, miserable and pathetic—yet, as the recent able report of the Mysore Committee on Begging reveals, a number have no need to beg, having good homes and ample money. The habit of begging becomes ingrained. Not only is the motive to accumulate money ever present, but with the blind man, once he has formed the habit of being daily in the streets begging, he finds it difficult to give it up. The bustle about him, the talk he has with passers by, and the slender value this has of filling the dark hours, make it infinitely preferable to sitting idle in his room. It is a habit hard to break; and the experience of the majority of the schools for the blind is expressed by the comment of one of them; "Exceptions among the begging blind do settle down in our school, but the majority resent the clean, healthy, disciplined life of a school or workshop. It is easier with the child to educate him to the more respectable life. Adults seem to settle for a time, then become restless for the old life and go off." "It is a persistent belief, in the mind of virtuous people that confirmed beggars may be reclaimed for normal economic life", says the Sir Dorabji Tata Graduate School of Social Work, Bombay, "this is false in a great number of

cases These factors render the personality unstable for any kind of durable adaptation, social or economic."

17. Yet a number of the schools say that if children come to them young enough, before the habit of begging is too ingrained, they can be reclaimed to a normal and useful life. "In my institute", says the Hon. M. Scott, of the Kalimpong School, "I have three adolescent lads who were all formerly beggars. They love the Institute's life and work and home life. They are merry, go to the market, do their own purchasing, etc. They tell me that they could make money by begging when they were small, 'if you remember to look miserable', but as they grew older they earned less, and in any case most of their receipts were taken by the friends who sheltered them; they would not now return to begging on any account. They say it is 'low down'."

18. Nevertheless, our welfare work of the future must be addressed far more to the training of the newly blind and the young blind, to prevent them turning to begging, rather than in attempting to make successful craftsmen of the present blind beggars.

19. **Training only part solution of blind begging.**—Even the complete establishment, however, of facilities for training and employment of the blind will not in itself remove the blind beggar from the streets, the bazaars and the sacred places. At most only one quarter of the blind community in any country is employable. In Britain all those who lose their sight after the age of 45, when they are no longer readily adaptable to life as blind people, are classed as "unemployable". Among the younger blind people, too, there are many who, because of ill health, additional disability or mental unbalance, have also to be classed in this group.

20. "Blind begger," says the League of Nations Report, 1929, "may be divided into three groups.

(a) Those who have resorted to begging because they have been denied an opportunity of being trained, after loss of sight, for some remunerative employment;

(b) Those who did not become blind until they were beyond the age of training and are now helpless and destitute; and

(c) Those, a relatively small number, who, lacking character and self-respect, beg rather than undertake more strenuous and less profitable work."

21. **Social security assistance also necessary.**—Unless, therefore, some social security measures are introduced which will provide sustenance allowances for the unemployable blind, (such allowances should be payable to the employable blind only as an augmentation to their earnings, and therefore be an encouragement to them to work) the blind beggar cannot finally be removed from the streets. He must remain until the following major provisions have come into force:—

(a) Educational and employment facilities for all employable blind people.

(b) Some augmentation of the earnings of the employable blind in the form of allowances from Government to compensate for their lower earning power as compared with the average sighted worker.

(c) Pension or sustenance allowance for the unemployable blind.

22. It is only in a few countries, where all these measures may now be said to be in full operation, that the last of the blind beggars is finally disappearing from public places. There is this factor to be borne in mind—that a small percentage of people prefer to make their living the easy way as long as they can, and therefore, a small ratio of the blind will beg so long as enough alms-giving public remains to make it profitable. But the time has come in socially advanced countries where the citizen, appealed to by the blind beggar, will answer, if the man appears old or invalid, "But aren't you getting your pension?"—or, if he looks young and hearty, "Why aren't you in the Blind Workshops where the men do quite well from their work and allowances?" Thus the poor blind beggar passes from the scene, having given way to the ordinary blind man of today, going between his modestly comfortable home and daily work, with the air of a free and happy citizen. It is a process which has taken a full century and a half.

23. **The part of legislation.**—Legislation will be necessary though it in itself will do little to remove the beggar. In no part of India has any legislation been enacted to control begging by the blind as such; but measures do exist in certain

areas to control or to prohibit begging altogether or to restrict begging by children, and which can, if there is sound reason for it, be applied to such of the blind as beg. (See Appendix F for applicable legislation).

24. Alternative means of support essential.—We asked the Inspectors General of Police of the various provinces what were their views on the question of legislation to control begging by the blind, stating that our own attitude was that begging by the majority of blind adult beggars might have to continue in the absence of any alternative means of support ; but that, as soon as adequate schools and workshops for the blind were available, begging by blind children should be made illegal. The reply from the Inspector General of Police, Bombay, sets out what everyone must regard as the sound view :—“ An examination of the legal provisions in Bombay will show that the offence constituted by begging under any of the circumstances mentioned in each case is a non-cognizable one ; nor does begging by blind persons in public streets cause such a grave nuisance as would incommode an average member of the Indian public. The police, therefore, never take any action against blind beggars, nor does any other agency, official or otherwise, exist in this Province, which makes its special business to control begging by the blind. It is also obvious that in the absence of adequate institutions catering to the welfare of the blind (there are only three or four in the whole Province as far as I know) any action taken under the existing legislation is sure to meet with strong opposition from the charitably minded Indian public, who consider it their religious and social duty to give alms to a beggar.

25. “ It is, therefore, essential that Government must first establish institutions for the education and support of the blind in needy circumstances, and encourage private enterprise in the matter of opening and managing such institutions, resort to them being in the first instance voluntary. If after watching their progress for a reasonable period of time, it is found that begging by the blind is appreciably on the decrease, recourse may be had to legislation, which, it seems, should be modelled more or less on the lines followed in the case of lepers by the Lepers Act III of 1898.”

26. “ It has been found ”, says the League of Nations Report, speaking of the attitude of the law towards the blind beggar in England, “ that the suppression of blind beggars depends on the willingness of the magistrate to convict, and he is often reluctant to do so until he is satisfied that the financial needs of the blind person will be otherwise provided... The suppression of begging depends upon the success with which their needs are met otherwise. It is inevitable that the enforcement of the laws against begging should depend upon the adequacy of the arrangements in force for the training, employment, or relief of the blind.”

27. Public should support Modern Blind Welfare Service.—There are, of course two parties to the practice of mendicancy—the giver of alms as well as the receiver. Apart from convincing the blind man that he will have a better and more profitable life by attending a school and workshops, we have to convince the generous public that they will be doing more good by giving their money to a properly equipped society for the blind than by giving it to him direct. It is, in short, a revolution from an old social security system to a new—a task not to be achieved easily.

28. On this aspect we take the following timely quotations from a paper by Dr. B. H. Mehta of the Sir Dorabji Tata Graduate School of Social Work. “ However difficult this problem may be, much of the indiscriminate small public charity can be diverted into more useful channels if religion, which once promoted indiscriminate charity, comes to the aid of the newer methods of charity organisation. Religion, which once rightly extolled the feeling of giving and explained renunciation as an important form of spirituality, must now analyse its own previous injunction, and explain to the layman the real meaning of charity in terms of modern social organisation and evolution... The time has come when the philanthropist has to be led, guided and helped, when the public has to be educated to discriminate between well-deserving and dubious causes, and when societies and associations have to be brought to the realisation that wise philanthropy and genuine service must yield results in terms of human welfare, happiness and progress... The present war, with all its evil consequences, is augmenting considerably the private wealth of a large number of individuals, business firms and organisations.

29. "India is a vast country, and the existence of many communities and the caste system comes in the way of any effort to organise charity on a national basis. To give charity for the benefit of one's own caste or community can be understood and appreciated but a wider outlook for a broadbased philanthropy has to be gradually realised.... As social consciousness continues to awaken in this country, there is a greater desire to see that charity serves a far greater purpose than providing temporary satisfaction to the giver and the receiver. The need is felt for a greater understanding of the human problem, and its solution by better understanding and co-operation between the public, the philanthropist and the government.... The philanthropist, endowed with wealth, must be aided by the State and organised charity to invest his wealth in causes which are worthwhile.... The road is a long one and India is only on the threshold."

30. It will be our aim in this report to outline a plan which will fulfil the principles Dr. Metha has laid down—a plan in which Government and private philanthropy can whole-heartedly co-operate in the confidence that the work for the blind, at least, is well founded.

CHAPTER IX.—THE UNEMPLOYABLE BLIND

1. **The Unemployable Blind.**—Unfortunately, as we have said, the full development of facilities for education and employment still leaves at least three quarters of the blind population in need of assistance. The census reveals that, of the 601,370 cases recorded in 1931, 398,948 were over the age of forty and therefore mostly unemployable. Their needs are two—provision for their maintenance, and facilities for their social interest.

2. **Maintenance.**—In the modern state, money allowances are available to the unemployable blind under one or other of several heads—old age pensions, invalidity pensions, pensions for the blind as such, war pensions, poor law relief, provident allowances from insurance companies and lodges, municipal relief, and pensions from private charitable foundations or from sums due under Workmen's Accident Compensation. A few, of course, have independent means while others are cared for by members of their families, and have no need for help from public funds.

3. **State Responsibility.**—The present trend is towards ever widening Government pension schemes or social security systems which assure the permanent maintenance in modest comfort of all whose age, chronic ill-health or disabilities are such that they cannot earn for themselves. This assistance is granted as a right, and carries none of the reproach which once characterised the drawing of state pensions or Poor Law Relief. Undoubtedly similar provisions will in time be made in India; and it will be the task of those responsible for blind welfare to see that the unemployable blind should be among the first, if not the first, to benefit. Theirs is a clear-cut case.

4. **First step in India.**—In the meantime some preliminary steps must be taken to provide an alternative means of support. Public action is under way to remove the beggar from the streets which demands that either he must be given a pension or supplied with a home, clothing and food. Homes are proposed to which all street beggars should be removed and where the various types will be taught suitable trades. This is a high aspiration, but we believe that almost all the adult blind beggars will be found to be unemployable. On the other hand, the blind beggar is a bona fide one, driven to begging by his disability. He deserves better than to be herded into homes with all kinds of riff-raff.

5. **Welfare Organisation to provide homes.**—We recommend that it should be one of the functions of our proposed Indian Council on Blindness to provide the homes for these and other unemployable blind, public funds meeting the cost of maintenance. The Indian Council should be made the agent of governments and municipalities for this work. It will be better qualified than public authorities in judging who are employable and who are not, and, being expert in caring for the blind, will give them happier living conditions.

6. To preserve a happy atmosphere in these homes, discretion should be used to admit blind people who are reasonably good natured and respectable in their habits. Any who have criminal characters or are distinctly unpleasant should be left to the homes for the destitute. Pleasant, simple, well-run homes have been

provided in considerable numbers in many countries and are undoubtedly a boon.

7. Facilities for social interest.—Apart from assured food, clothing and a roof over his head, the "unemployable" blind man has a second great need—interests with which to fill the long, dark days. These, as we outline in paras. 25—27 of Chapter XII, the modern organisation most willingly supplies. How active a man will become depends to some extent on his own spirit of enterprise, but most upon the lead he is given. A number of societies, libraries and homes have classes for the middle-aged and elderly newly blind, where they learn to read Braille, to type, to write, to play cards, dominoes and draughts, to knit and to do other light handwork.

8. Home visiting service.—Many home-teaching and home-visiting associations or departments of societies have been formed, which work widely among the unemployable blind in their private houses, bringing a vast amount of pleasure, interest and usefulness into their lives. In some countries this service has been embodied by the state as part and parcel of the blind welfare system. Some of these societies have sufficient resources at their disposal to distribute free radio sets, Braille watches, musical instruments, clothing and the materials for trades. Most of them organise entertainments, take parties to theatres, cinemas and concerts, while others have clubs to which the local blind people can come every day if they wish. All this has changed the whole world for the blind.

CHAPTER X.—PENSIONS AND PUBLIC ASSISTANCE

1. Public assistance now an established principle.—The acceptance of the principle that it is the duty of government to compensate the blind for their lost earning power has spread rapidly in recent years. Australia granted invalid Pensions, to which the blind were entitled, about thirty years ago; in Britain, the Blind Persons Act of 1920 entitled blind people to draw the Old Age Pension from the age of fifty, amended in 1938 to the age of forty, and requires that augmentation of wages and domiciliary allowances be paid respectively to employable and unemployable blind and that there shall be adequate provision, at the expense of the State if need be, for the education of blind children; New Zealand instituted a Pension for the Blind in 1924; South Africa about ten years ago; and Canada in 1937. It would appear that once public assistance of this kind has been enacted, subsequent amendments invariably make the terms more generous, both in the amount of the assistance and to the classes of people entitled to it. Several European countries and a number of the American States have established blind pensions. Where there is no such direct provision, the care of the destitute-blind is usually a charge upon local communes or cantons under poor law provisions.

2. Destitute blind a reproach.—In fact, the point has been reached in human society at which the presence of blind beggars in the streets is regarded as a reproach both to the community and to public authority. It is a slur upon them that they leave people, so badly hit by life's misfortunes, so unprovided for that they are compelled to plead for alms from passersby. The time has come when it might be said that the numbers of blind, halt and diseased beggars in the streets is the barometer of the peoples' social conscience. When the citizens see their blind folk neat in dress, happy in face and with purpose in their step, they will find pride in their city and a greater pleasure in their own personal prosperity.

3. Assistance a right.—Another marked trend is towards assistance to the blind being removed from the "poor relief" and "relief of destitution" type of charity, grudgingly and meanly given only after the pleader for it had shown he was reduced to his last crust and his last miserable rags. Assistance is being granted increasingly as a "right" to a blind man, a payment the community is glad to give him, in recognition of the fact that he has, through no fault of his own, suffered a grievous blow at the hands of fate, which has profoundly affected his earning power and his capacity to enjoy life as his seeing fellow-citizens do. The provisions, limiting the amount of earnings, private income and property he may have, in order to qualify him for a pension, or of denying him assistance if his relatives could support him, are becoming steadily more liberal. It is, indeed, a matter in which countries can afford to be generous.

4. Penalising effort.—All the earlier pensions for the aged, invalid or blind suffered from a multiplicity of such restrictions, one feature of which was extremely harmful to the economic progress of the blind—the type of restriction which reduced the amount of public assistance by whatever sum a blind man earned by his own efforts. He naturally asked himself the question “Why work?” It had the calamitous effect both of encouraging deceit, and, worse, of directly discouraging effort. It is being remedied in various ways. In Britain, State and Municipal assistance to the employable blind is given mainly in the form of augmentations of earnings. In New Zealand the same basic rate of pension is payable to all blind persons over the age of 16 years; but to those who earn by their own efforts, an additional pension is payable in the form of a subsidy on earnings, thus rewarding, not penalising effort. The soundest point of view of pensions for the blind is that blindness is under all conditions a severe economic handicap, and therefore it is best to give to all blind people, irrespective of means, a fixed sum as a compensation for that disability, without embarrassing them or loading the State with all the minute detail of enquiry into their individual means or earnings.

5. Points to be noted.—Probably the greatest difficulty in the administration of pensions or other forms of public assistance for the blind is the determination as to who is and who is not blind. Many people with weak vision try to qualify; and the eye specialist has to deal with plenty of cases of malingering and hysterical blindness.

6. It has been remarked in the Report of the League of Nations that, where the move for the granting of blind pensions has come from workers for the blind, it has led to less abuse and fewer difficulties than when blind men have themselves led political agitations for this purpose.

7. A Blind pension not a burden.—It is hard to estimate the cost to the public of such pensions. Is it greater or is it less than the total sum paid in the past to beggars, many of whom were frauds? The pensioner uses his money to buy food, clothing and housing. It passes to the shopkeeper, the landlord, the factory worker and the farmer, and the government taxes it on every stage of its journey. Economists will be able to say whether a pension for blind people is in truth a burden on the community, but even though it may weigh a little upon us, it will appeal to all that a pension by right is the logical and equitable development.

8. Years may pass before wide pension schemes come into force in India. When they do, or should assistance be given by municipalities and other bodies, we recommend that the foregoing principles should be adhered to.

9. First step in India.—Pending the coming of a general provision for the blind, what preliminary step can be taken? We strongly recommend that it should be in the form of government provision or aid in respect to the blind people who come within the orbit of the Indian Council on Blindness (outlined in Chapter XVI). This would apply to pre-school children taken into nursery or “sun-shine homes”, to blind children of school age, to employable adults, and to unemployable adults who have no adequate support or home of their own. We assume that Governments will be undertaking the education of blind children as part and parcel of the State system of general education. However, the care of pre-school children, the provision of employment for trained blind adults and the accommodation of the homeless unemployable blind are spheres in which it is improbable that Governments can take immediate and full financial responsibility. At this stage they are better dealt with by private philanthropy with Government assistance. We therefore recommend that in the coming period of advancement, the Government should meet all the costs of educating blind children while, in the case of the other three major groups, it should assist the Indian Council on Blindness and its subsidiary bodies by substantial grants in aid, preferably based on a *per capita* system. When the Indian Council has built up a sound after-care system, an allowance from Government should be payable to *bonafide* blind workers in independent occupations, subject to limitations as to earnings, in order to offset their lower earning power and higher cost of living as compared with sighted workers.

10. Results to be expected.—Adequate help in this form would remove most of the difficulties under which blind welfare in India at present labours. With the

cost of educating blind children shouldered by Government, well-run Provincial Councils on Blindness would be able to concentrate upon the care of pre-school children, and/or the all important task of employment for the adult blind, plus the provision of homes for the elderly and unemployable blind.

11. The whole blind community in India cannot at once be embraced in a complete scheme; but a system such as the foregoing would make it possible to build up the work stage by stage, area by area, until eventually all the needs of the whole blind community would be covered. Such is the case today in England under the Blind Persons Act, in New Zealand under the Social Security Service and in various other countries.

CHAPTER XI.—EXISTING SCHOOLS AND SOCIETIES FOR THE BLIND AND THEIR DIFFICULTIES

1. Before we outline the scope of modern education and employment and its application to India, we will survey the existing schools and societies and discuss their difficulties. There are thirty-two and they may be classified in the following way :—

2. 24 are schools for the blind only; 5 are for deaf-mutes as well as blind; 1 is in combination with a poor asylum; and 2 are departments of missionary establishments.

Of the total, 7 are in Indian States and 25 in British India. They are controlled, 1 by a Provincial Government; 4 by Indian State Governments; 2 by societies in Indian States; 1 by private ownership in an Indian State; 19 by societies created for the purpose; and 5 by Christian Missions.

Altogether they have a total enrolment of 1212 blind people, of whom 704 are boys and 180 are girls. Adults among them number 328. The majority of them receive a small measure of Government and/or municipal aid. No schools have been established in Assam, Orissa, North-West Frontier Province or Baluchistan.

3. The first school was founded by Miss Annie Sharp in Amritsar in 1887, and was moved to Rajpur, Dehra Dun in 1905 where it still continues its good work as the Sharp Memorial School. It was followed three years later by the Church Missionary Blind School at Palamcottah, begun by Miss A. J. Askwith—a busy establishment today, managed by Canon W. G. Speight, a blinded soldier of the Great War, 1914-18. In 1897 the late Mr. Lal Bihari Shah founded the Calcutta Blind School, which is now supervised by his son, Mr. A. K. Shah. The Society for the Propagation of the Gospel opened a school at Ranchi in the following year. The first school founded in an Indian State is the one at Mysore, opened in 1901.

4. Considerable stimulus was given to the work in Western India by the late Mr. C. G. Henderson, I.C.S., whose own child was blind. He laboured strenuously in this field of voluntary effort from 1919 to his death in 1931, being instrumental in the founding of the Blind Relief Association, Bombay (1919) and the Henderson Blind Relief Association, Sind (1925). The former now administers two schools, and a home for the blind, and conducts useful preventive and treatment work in various areas of the Presidency. Another Bombay society is the Chhatrapati Anndh Sahitya Sanstha which was formed in 1938 to forward the interests of the blind and to produce Braille books.

5. The Madras Association for the Blind began in 1929, with Presidency-wide objectives, though its work has so far extended little beyond the running of the Victory Memorial School for the Blind at Poonamallee. It plans, however, to modify its constitution and to prepare the way for affiliating effort throughout the Presidency and its co-operation with an All-India Scheme.

6. Recently an association of blind people has come into existence in the Punjab, the Association for the Welfare of the Blind, which proposes to stimulate interest in the blind and to conduct a school. There are proposals afoot in Belgaum and in the State of Indore to start schools.

7. Two associations have been founded in Calcutta with All-India objectives—the All-India Lighthouse for the Blind, 1941, of which Lord Sinha is the President; and the All-India Association for the Welfare of the Blind, also founded in 1941, under the presidency of the Most Rev. The Metropolitan of India, Burma and Ceylon.

It may be possible for them to merge into the plan we shall recommend in this report.

8. Another branch of organised effort towards better days is represented by the course of lectures given in the University of Calcutta by Mr. S. C. Roy, M.A., B.L., himself blind, on the education and welfare of the blind, to classes of teachers. In Bombay, too, Dr. R. M. Halder, B.A., Ph.D., gives a course of training to teachers, and similar provision is made in the Calcutta School.

9. The 31 existing schools, or schools plus homes and workshops, are set out in the following table :—

Name of Society	Date founded	Present Roll			Total	Additional accommodation available in existing buildings	
		Boys	Girls	Adults		Child-ron	Adults
BENGAL							
The Calcutta Blind School, Behala.	1897	54	9	29	92	100	200
All-India Lighthouse for the Blind, Calcutta.	1941	..	..	17	17	..	100
Institute for Blind Hill Boys and Men, Kalimpong.	1940	4	..	2	6	4	One family.
BIHAR							
S. P. G. Mission Blind School, Ranchi.	1898	28	10	22	60	30	70
Blind School, Patna . . .	1922	31	..	3	34	..	..
BOMBAY							
Dadar School for the Blind	1900	23	13	6	42	14	..
The Happy Home for the Blind.	1925	18	..	4	22	50	..
N. S. D. Industrial Home for the Blind.	1917	14	..	25	39	..	25
Victoria Memorial School for the Blind.	1902	72	..	5	77	25	..
Poona School for the Blind	1935	15	..	5	20	..	..
The Haji Allarakhia Sonavala Andhakshi Ashram, Andheri.	1938	..	13	..	13	..	90
C. P. & BERAR							
Blind Boys' Institute, Nagpur.	1928	35	..	3	38	5	..
MADRAS							
The Educational and Industrial School for the Blind, Palamecottah.	1890	44	35	37	116	35	..
Victory Memorial Blind School, Poonamallee.	1929	19	11	58	88	200	..
Lutheran Mission for the Blind, Rentachintala.	1910	20	14	1	35	20	..
Catholic School for the Deaf and Blind, Ramnad District, Sirivilliputur.	..	(40?)	(20?)	..	..	..	..
PUNJAB							
Shri Virja Nand Anndh Kanya Vidyalaya, Amritsar.	1941	..	14	3	17	..	..
Institute for the Blind, Amritsar.	1930	60	..	3	63	..	..
Emerson Institute for the Blind, Lahore.	1906	23	..	4	27	..	..

Name of Society	Date founded	Present Roll			Total	Additional accommodation available in existing buildings	
		Boys	Girls	Adults		Children	Adults
<i>SIND</i>							
Ida Rieu School for the Blind, Karachi.	1921	26	..	9	35	22	..
<i>UNITED PROVINCES</i>							
School and Home for the Blind, Allahabad.	1910	14	..	14	28	11	12
Sharp Memorial School for the Blind, Dehra Dun.	1887	3	35	22	60	8	..
The Blind School, Lucknow.	1940	8	..	2	10	10	..
St. Dunstan's Hostel for Indian War-Blinded, Dehra Dun.	1943	..	..	22	22	..	..
<i>STATES</i>							
School for the Deaf and Blind, Baroda State.	1915	12	6	..	18	..	..
Krishna Kumarsinghi School and Home for the Blind, Bhavnagar.	1932	20	..	3	23	..	..
School for the Blind, Cochin	1934	20	..	..	20	..	..
Government School for the Deaf and Blind, Hyderabad, Deccan.	1939	12	..	..	12	15	..
Shri Madhav Blind Asylum, Lashkar, Gwalior.	..	17	..	6	23	..	..
School for Deaf and Blind Boys, Mysore.	1901	64	..	3	67	..	..
Government School for the Blind, Bhawalpur.	1943	8	..	3	11	4	..
Total		704	180	328	1,212	553	497
Schools	32						

The following schools, with the estimated number of blind pupils shown in brackets are recorded in various reports as existing; but repeated enquiries by mail have brought no response; and it must be presumed that either they have ceased to exist, or that they may be disregarded so far as the broad question of blind welfare is concerned. Ahmedi School for the Blind, Aligarh (16); Tirupattur Blind School, Swedish Mission, Ramnad District (7); Kumar Lalsingh Mansingh Industrial School, Mainpuri, U. P. (7).

10. **Costs of Schools.**—Twenty-two schools have given the exact, or the approximate, cost per pupil, the figures in most cases being for 1942. They cover all costs—staff, overhead, repairs, food, etc., but probably include no rent or interest on capital. Undoubtedly the schools have been administered with the greatest economy and with a very low standard of salaries to staff members, sometimes the conditions as a whole being of the barest.

11. We give detailed figures in Appendix G.—They range from Rs. 91/13/- per head per annum, for pupils of the Lutheran Mission School at Rentachintala, Madras Presidency, to Rs. 600 in the Emerson Government School, Lahore. In the Kalimpong School, where the Hon. Mary Scott administers her establishment as a personal voluntary service and the pupils number six, the average cost is Rs. 144. At the S. P. G. Mission School, Ranchi where Miss G. Bateman also takes no salary the average cost for sixty pupils is Rs. 120. Similar conditions may prevail at the

Lutheran Mission, whose school is but one department of a large establishment. The average cost throughout India was Rs. 267/6/-. 1944 costs would, of course, be higher. We may not be able, in a wide expansion, to count on a continuance of much of the devoted voluntary missionary spirit of the past. Also, even the simplest training course calls for higher standards of equipment and maintenance than many of these establishments have been able to afford.

12. The thirty-two schools represent an extremely small though gallant effort. Severely handicapped by lack of money, faced by an apathetic public, ill-equipped with staff, they have been able to make but little change in the life of the mass of the blind. Yet they have shown convincingly enough that the blind of India are as apt pupils and as keen learners as the blind of any other country.

13. **Numbers available for Training.**—It is striking that while the schools have potential accommodation, not fully equipped it is true, for 2,187, their combined rolls total only 1,212. If we take the blind population as being not more than two million, the figure of 1,212 represents only .0606 per cent. of the blind population. We naturally ask why it is not greater. We have enquired from the schools, "Are there considerable numbers of young adults and children in your district who would benefit by education, vocational training and employment, who are not now attending?" Of the twenty-five replies received, twelve answered with a simple affirmative, while the following fuller expressions of view were given:—

Calcutta Blind School, Behala.	"Yes, there are about 40,000 blind in the whole of Bengal, of whom about 10,000 are children."
Lighthouse, Calcutta	"In Bengal, the number of adult blind is about 33,000. It is hardly necessary to state that the majority of them will benefit by suitable education, vocational training and employment."
Kalimpong	"Up to the present the Institute is not very well known; but, including the neighbouring countries of Tibet, Nepal and the State of Sikkim, there is a large field from which to draw. Three of my pupils are from Sikkim."
Ranchi	"I am sure there are many more blind children in the province, in remote districts, who ought to be in school. It is difficult to reach them without a special campaign to search for them, or compulsion."
Lahore	"Yes. The census of 1931 shows the number of blind in the Punjab to be 57,000 and nearly four times partially blind."
Karachi	"Our institution is the only one of its kind in the province of Sind and there is a very large number of young adults and children who could take advantage of this institution and do not."
Bhavnagar	"Yes, a very large number. We have to refuse very many applications."
Dadar School, Bombay	"There are considerable numbers of young adults and children who would benefit by education and vocational training who are not now attending. The following table has considerable significance:—

Blind Population of Bombay Province.

	Ages	Male	Female	Total
•Pre-School	0—5	622	452	1,074
Educable	5—20	2,775	1,900	4,675
Trainable and Employable	20—40	4,238	3,620	7,858
Aged and presumably unemployable through lack of previous training.	40 and over	12,489	15,058	27,547

20,124 21,030 41,154

Blind population of Sind 8,123
Blind population of Bombay 33,031 "

Happy Home	"Yes, there are hundreds of blind beggar men and boys who could gain by vocational training."
Poona	"Yes. There is a considerable number of young blind children and adults who would be benefited by vocational and art training."
Poonamallee	"Not more than five per cent. receive the benefits of organised education and training in South India."
Palamcottah	"In view of the average number of blind persons per district in the Madras Presidency, it is obvious that there must be a large number of blind children, adolescents and adults, who could so benefit. Also it should be borne in mind that this is the main institution for the blind south of Madras, and the sphere of influence extends far beyond the bounds of Tinnevely District."
Mysore	"There are of course considerable numbers of young adults and children in the State who are not now attending."

14. The difficulties of getting blind pupils enrolled.—The schools have sent frank replies to our question, "What difficulties exist in getting blind pupils enrolled?"

Lighthouse, Calcutta	"The main difficulty is financial. Unless we have adequate funds, we cannot admit more students. Most of these blind persons are so poor that the institution will have to provide them with free board, lodging and tuition."
Blind School, Calcutta	"The apathy of the guardians. Generally speaking the rich do not consider educating the blind is of any use, and the poor send their children to beg. Blind children are a blessing to them in disguise."
Ranchi	"The ignorance and apathy of parents."
Patna	"Pecuniary difficulties for maintaining them and also want of rooms in the school and hostel."
Lucknow	"Want of funds to carry on propaganda to induce the blind and their guardians to take advantage of the school."
Allahabad	"Indifference of parents, poverty and use of children as beggars."
Amritsar Boys	"Ignorance, apathy and illiteracy of parents and the habit of begging."
Lahore	"The chief cause is the limited space in the Institute and mendicancy i.e., the parents would prefer to send their blind children abegging where they anticipate more earnings as compared with what they would earn after education."
Karachi	"The difficulties are that begging is more paying and offers greater individual freedom than training in a school does, and the very low percentage of the educated population in the Province leading to the point of view held by Government and local bodies and the public generally (including parents and guardians of blind persons) that where so many of the sighted go uneducated, it is not necessary to bother about the blind."
Bhavnagar	"Finance. They cannot afford to pay monthly charges and we have no funds."
Dadar School, Bombay	"Lack of facilities for registration with an organisation for the blind; lack of proper census, apathy on the part of the adult blind to active work; ignorance that the blind are educable and that they can become contributing and self-respecting citizens."
Happy Home, Bombay	"They prefer to beg because it is more remunerative."
Industrial Home, Bombay	"Want of money is the first difficulty and the second is their wandering habit; but the latter can be overcome if we catch them young."
Victoria Memorial School, Bombay.	"The difficulties are poverty, the illiteracy of the parents and their ignorance of the education of the blind; the parents' unwillingness to part with their children, and want of employment after training."
Blind Women's Home, Bombay.	"The difficulty arises in getting them admitted in the Ashram, as there is no legislation, and therefore legislation is the most burning factor of the beggar problem and has to be solved without delay."
Poona	"The guardians are quite reluctant to send their blind children to school, as they can acquire money enough to support their family by sending them out for begging and hence some sort of compulsion is necessary on the guardians to send the children to school. It is also essential that the school must be residential making provision for their boarding, lodging and clothing."
Nagpur	"Ignorance and poverty."
Poonamallee, Madras	"There were many difficulties in the beginning, but these are gradually being overcome. Many poor parents and relatives regarded their blind son or daughter as a source of income by using them for begging and refused to allow them to be admitted to school. Again, often illiterate parents could not understand that the blind could be educated and trained to be useful citizens, and to be to a large extent independent."
Palamcottah	"The difficulties can be divided into two groups:—(1) The strict limitations imposed by the accommodation available, and availability of funds to meet cost of maintenance. (2) Ignorance on the part of blind people and their friends regarding the existence of the school, the possibility of any form of education or training, and the poverty of the people themselves, which means inability to meet travelling expenses, fees, etc. There is also a certain amount of suspicion regarding the activities of the institution, not only on account of its being a missionary enterprise, but also the fear, in some cases at least, that parents and friends may never see the pupils again, or that the school has some mysterious ulterior motive. Regarding suspicion of missionary enterprise, this is often grossly exaggerated although it is true that it does exist in some cases. The number of such cases, however, has never been large, and diminishes steadily

as factual information regarding our work becomes more widely known. In some cases parents, and particularly mothers, are unwilling to send their children for purely sentimental reasons, and as education is not compulsory, nothing can be done if persuasion fails."

Rentachintala	"The tuition and boarding charges. Very few have money to spend on such defectives, therefore, they prefer to beg."
Mysore	"There is not sufficient accommodation for them all. The funds at our disposal are very meagre to attend to their needs. It involves heavy extra cost in providing staff."
Cochin	"Financial difficulty."

15. On this matter Sir Henry Holland says, "Regarding the question of bringing about a close link up between the medical ophthalmic service and institutions for the training of the blind, I may say that this is the weakest link in the chain of treatment of the blind. As we have found from experience it is almost impossible to get parents to send their children to blind schools or workshops for training, preferring to let their children either do nothing or earn their livelihood by begging."

16. The foregoing comments indicate clearly enough that the income to be got by begging, the ignorance, apathy and poverty of the parents and the slender funds of the schools themselves are the outstanding difficulties.

17. **Lack of subsequent employment.**—To some degree, however, the attitude of the parents and of the blind themselves may be accounted for by the very potent reasons given by the Victoria Memorial School, "The lack of employment after training", and by the Lahore School, "The parents would prefer to send their blind children abegging, where they anticipate more earnings as compared with what they would earn after education". The best recruiting propaganda is the demonstration of success; and unfortunately so few schools can point to a substantial number of old pupils in steady remunerative employment.

18. **Paucity of opportunity.**—In his interesting study "Society and the Visually Handicapped", 1943, Dr. R. M. Halder, B.A., Ph.D., of the Dadar School for the Blind, makes the following comment: "It is estimated that up to the present time 4,830 pupils and workers have so far passed through, or are at, the existing 38 schools and institutions. Of this number, 1,178 are still in them, while of the remainder, 3,552 who have passed out during the last fifty-six years, at a liberal estimate, not even ten per cent. have been successful, fairly successful or slenderly successful. The number of blind persons who have left these institutions during the last 25 years, and are living today as self-respecting and more or less self-supporting persons, may be enumerated as follows: self-supporting and contributive in the truest sense of the terms, 8; fairly successful, 123; slenderly successful, 212; making a total of 343."

19. "Speaking generally, the apparently poor results may explain in some measure the apathy of the public. In fairness, therefore, the odium must be partly shared by some of our institutions, though they have done a splendid pioneering work under difficult circumstances. The dearth of industrial homes or supervised, subsidised workshops for post-school pupils and the lack of co-ordination of such homes with the schools are keenly felt. There is a need for many more of these industrial establishments.

"The successful blind people of our country have done wonderfully well considering the meagre facilities and opportunities that are offered to them."

20. The schools have been faced with immense difficulties in getting their trainees placed. Here are their replies to the question, "What difficulties do you experience in getting your trainees into employment after their training is complete?"

Calcutta School, Behala	"The apathy of the employers, their prejudice against employment of the blind. It is slowly being removed."
All-India Association	"Difficulty in finding suitable positions for them, as the public prefer to appoint sighted people with less pay."

Ranchi	"If they wish to go into our workshop they can all earn, but some wish to return home and everyone could not be kept on, there would not be room for new comers. All have benefited immensely by their years in the school, physically, mentally and by being taught that they need not sit idly about. A few of those trained here are working elsewhere, the difficulty is to find someone to give them a house and helping hand. There is good demand for cane workers and a few are now doing daily work in the bazar, as we had no cane."
Patna	"Apathy of Government Institutions and offices to take them in."
Amritsar Boys	"We have no workshops of our own which can absorb our-ex-trainees. Nor have we any provision for the permanent after-care of our inmates. This is due to the lack of sufficient funds essentially required for such schemes. The fact that there is no system by which the student can pass from school to training centre, and from training centre to workshops makes the education of the blind very disappointing, and it is why parents are disinclined to send their children to school."
Lahore	"There is no good scope for the services of the blind in this Province. There are several jobs which can be executed by the blind, but on account of defective eyes they are not preferred."
Karachi	"Where labour is very cheap, and the unemployed so very many, it is difficult for the blind to compete for employment. In India employers of labour have not yet made any special provision for employing the handicapped."
Dadar School, Bombay	"Disbelief in the capacity of the blind by the public and in many cases training unsatisfactory or incomplete."
Happy Home, Bombay	"Blind people work slowly. They do not earn enough to stand on their feet without the support of a Home where they could be lodged and boarded very cheaply. Most ex-trainees go to their parents in their native country and we do not know what they do there."
Industrial Home, Bombay	"They cannot compete with the sighted people."
Victoria Memorial School, Bombay	"Want of special well-equipped and suitable workshops for the blind; and homes to shelter them. Existing workshops for the sighted are afraid to take up the blind, due to difficulties of managing them."
Poona	"There are no voluntary agencies working in India for the welfare of the blind. If any such body is created, the difficulty of getting employment for the blind will be removed to a great extent."
Nagpur	"Those who are trained in music, especially in vocal music, have comparatively greater facilities of getting employment as music teachers in big cities, but those who are trained in cottage industries find it difficult to earn their livelihood."
Poonamallee	"Nil. All are employed in our own workshops. Securing employment outside for ex-trainees has not so far proved successful."
Palamecottah	"The chief difficulty is the complete lack of any kind of workshop facilities, and this again can only be rectified by extension. In the case of this institution funds do not permit of the establishment of a workshop to provide permanent employment."
Lutheran Rentachintala	"For the time being the school is not able to employ trainees. The matter of employment rests entirely upon the patrons who send the children."

21. Workshops needed.—It will be observed that the only really satisfactory reply is that of Poonamallee (Victory Memorial School), while that of Ranchi (S. P. G. Mission School) is partly so. Amritsar Boys, Victoria Memorial, Bombay and Palamecottah put their fingers on the real need, that of workshops for the employment of their trainees when qualified.

22. Aim of Education.—In seeking the causes for poor success in the field of employment, we might observe that to some extent the school methods appear to have been copied in too wholesale a manner from Britain and America with too great a bias towards academic learning and too much emphasis on Braille. The result is young men who, though they can read and write well, have only the remotest prospects of earning for themselves. The aim of education is to equip young people to earn their living and to take their full part in the life of the community. If it is not succeeding in this, some modification in method is due. The changes need to be towards a keying-in better with the life of India, taking blind welfare work stage by stage, marching in step with the social advancement of the people, rather than attempting undue short cuts straight to the point which western blind welfare work has reached. It has taken the west at least a hundred and fifty years to give the

blind their present status. The adverse circumstances in the Indian picture have been common to all lands and have had to be met by a painstaking process of trial and error. Nevertheless with the advantage of the knowledge gained in the west, plus that of the schools which have done a valuable pioneer work here, we should be able to cut that century and a half to a considerable degree. That the existing societies in India should not have achieved more is no reflection upon them. It was, and is, a phase through which the work has to pass in its evolution towards better things ; and it forms a good foundation on which to build further.

CHAPTER XII.—PRINCIPLES AND POLICY OF EDUCATION IN INDIA

1. **Four Groups to be Educated.**—Education, in its application to the blind community, means a great deal more than the mere scholastic and manual training of blind children. Sight is lost at every stage from the hour-old baby to the bent greybeard of a hundred years. This fact presents us with four groups to educate of roughly the following ages :—

(a) Children of under six who have to be taught to play, dress and do things like other children.

(b) School children of from six to sixteen getting their usual schooling.

(c) Older boys and men from the age of about sixteen to forty or forty-five who have lost sight after school age and who require instruction in how to live usefully in their new situation and to have employment.

(d) Men and women who become blind after the age of forty or forty-five and who probably are beyond the age where they can learn and take up a new occupation. Nevertheless, much useful training can be given them.

2. A complete educational system for the blind has, therefore, to be ready to accept new pupils—new so far as blindness is concerned—at almost any age. In India we suggest that not very much should be attempted with group (d) for some time to come. They are the least adaptable, and they have but a few years of blindness before them. Groups (a) and (b) and the younger half of (c) are far more important ; and it is upon them we should concentrate. With only minor exceptions, the existing schools concern themselves only with group (b). The care of group (a) should come into being as a subsidiary activity of the schools, while the education of group (c) will be associated mainly with the adult workshops when they are established.

3. **Object of Education.**—Most Schools set out as their major object—and we quote a typical one—“To educate and train blind boys in arts and handicrafts to enable them to earn their livelihood by their independent efforts.” But education and vocational training by themselves will not, particularly at our present stage in India, enable a blind person to earn his living. The schools have discovered this. Government inspectors, generous contributors, and the visiting public are easily satisfied that the school for the blind in which they are interested is doing a very satisfactory and humanitarian job. They find clean buildings, nice dormitories, children reading brightly in Braille, or rattling off sums on an arithmetic frame ; the Boy Scouts are smart and drill well, the band plays nicely—everyone looks happy and well cared for. It is all as it should be and quite splendid as far as it goes, but what is the answer to the question, “How many of your old pupils are in satisfactory employment today ?” We have to take the phlegmatic sceptical public a long way on the road to enlightenment, before a blind trainee, well equipped though he is with an elementary education and a skilled trade, can turn his back on his school to find easily a job in town or village. So that education of the blind carries with it the responsibility of finding subsequent employment ; and thus we find that our simple little plan to educate blind children leads us into many complexities—in fact, the handful of philanthropic people, who founded a small school for blind children, will one day discover that it has gradually evolved into a large society, administering the affairs of a group of men, women, boys and girls of all kinds and conditions from the cradle to the grave, and with a range of services almost as varied as those of government itself. In this and subsequent chapters we shall deal with many, if not all the aspects of this intricate business.

4. **Pre-school age children.**—The earlier a beginning is made with the training of the blind after their loss of sight, the quicker and more satisfactory will be the results. This applies to both children and adults. Otherwise habits are formed which become hard to break, the mental outlook grows warped—depressed, defeatist, fatalistic or just dulled; bodies wilt through lack of muscular exercise, outdoor exposure and interest in life so that the subsequent task of training is doubly difficult and will often never be completely successful.

5. The properly cared for blind baby has a much greater chance than its neglected brother or sister. The rule guiding their treatment is a simple one—bring them up as nearly as possible as ordinary children. They should be taught the habits of cleanliness, dressing and feeding at the same ages as seeing children. They should be encouraged to walk at the same age, and before that, given firm objects within their tiny grasp by which to pull themselves up, so exercising and strengthening the body. They should be encouraged to crawl and explore, often helped by a ball of rubber or cane in which is a small tinkling bell. When they begin to walk, they should not be discouraged from moving about freely.

6. **Sense of obstacle.**—Most people are unaware that the younger blind rapidly develop a sixth sense—the sense of the presence of obstacles. It is associated, it seems, mainly with hearing, but probably also with the delicate nerves of face and skin. Walls, chairs, tree trunks, cars standing in the road, a bullock cart, pillars, large stones or banks by the road side, a closed gate or door and similar objects radiate a feeling of their presence, a solid, looming feeling, which the normal young blind sense unconsciously. It can be felt from one, three, five and even ten feet away, according to the blind person's sensitiveness, the size of the objects and such interferences as traffic noises, wind and rain. These bulky objects are sensed in the entire absence of them themselves giving off any noise.

7. **Use of other senses.**—Sounds too, of course, play a most important part—the rustling leaves of trees, train, car and tonga noises, the grinding of mills, the cries of animals and birds, the sound of conversation, footsteps, the hundred other sounds of household, garden and street. They all give direction and position. Other senses and feelings, too contribute as guides and conveyers of information—the smells of kitchens, flowers, shops, streets and animals, breezes coming through doors and windows and round corners, the warm feeling of the sun's rays striking through doorways or through spaces between trees, and the heat from a fire. If a blind child is encouraged freely to move about using these unconscious senses, he will soon know every detail of the immediate neighbourhood and be able to play about as other children do. He will soon learn, too, that it is not wise to touch fire and hot cooking pots. A wise parent will let his exploring child touch them once or twice, so that he will know to avoid them in future.

8. **Caring for the pre-school child.**—Through the ignorance or mis-placed kindness of parents in following the line of least resistance, many blind babies are kept backward and helpless, nursed as infants in arms, long after the normal age, their minds and bodies atrophying and thus being burdened with an additional handicap to go with them through life. When the small blind child reaches the age when other children run messages or do little jobs, he, too, should be given them. It will make him happy—he does not know why—but it is because he is contributing something to the society he lives in; he feels important; it is an invaluable step in preventing him developing an inferiority complex, inevitable in the blind child who is not allowed to be useful because he is blind, because he is different, or because it might be dangerous for him.

9. The proper care of the pre-school child is secured in a variety of ways. To intelligent parents a visit from a voluntary worker or a home teacher to give practical instruction, a pamphlet on the subject, and a liaison maintained with a good school for the blind are all the steps that are necessary. In homes where the mother's character and patience are not equal to the task, or the parents are less educated, a monthly call by a home visitor will be required to keep the child cared for on the right lines.

10. **Homes for blind babies.**—Where the home conditions are too bad, or with orphan and illegitimate children, the proper course is for the child to be taken into a special home for blind babies, called in England "Sunshine Homes". Such homes

in India, run in association with schools for the blind, would be most helpful. Also the services of such groups as school teachers, members of women's and children's welfare societies, Junior Red Cross, Boy Scouts and Girl Guides should be availed of to carry knowledge of the right way to care for blind children to the parents in the villages.

11. The School.—The blind child is in search of knowledge and occupation to fill the dark days ; ordinary principles of education apply here as elsewhere—and ingenious apparatus has been designed as aids—Braille, of course, raised maps, the Taylor frame for arithmetic, apparatus for mathematics, the typewriter and so on. Discipline need be no different from what it is in other schools ; and with a competent staff and a good syllabus, punishments will seldom be needed. What with school work, helping in domestic jobs about the place, music, and plenty of exercise at gymnastics, physical drill, the running track, swimming, rowing, swing, see-saw, wrestling and so forth, there will be few idle moments in the daily round. Morals have to be watched as in other schools.

12. The simplest education called for.—What we would urge is a simple curriculum aimed at a practical objective. The time table is apt to degenerate into a jumble of too many subjects which produce young men with an unsatisfactory smattering of knowledge—a bit of English, some typing, a fair proficiency at Braille, ability to make a few mis-shapen baskets and to squeeze a bit of music out of a harmonium. But they are not yet able to earn their living. Another tendency is to yield to the temptation to allow unimpressive and unsuitable types of boys to drag on to matriculation and university, who can never hope to make their way in the world afterwards. The exceptional boy, yes ; only if the school is convinced of his outstanding capacity and personality. For the others, a simple elementary education to fit them to be skilled craftsmen in a workshop for the adult blind, which present circumstances in India indicate will of necessity be the main outlet for employment at least for this generation.

13. Apparently the schools need to be residential in character. The existing schools are unanimous that day attendance is unsatisfactory ; and in any event most of the children are too scattered in villages for other than residential schools to be practicable. Where satisfactory day attendance can be assured, it is always possible of course, to admit day pupils.

14. Separating boys and girls.—Viewing the education of blind children in India in its relationship to the education of seeing children, the Committee considers that, for practical and economical considerations, it is desirable to put primary and middle sections in one unit. Separate schools for boys and girls should be provided wherever numbers permit. At the primary stage, however, as in the case of normal children, mixed classes may have to be retained for economic reasons. In any case it is considered desirable that, from the middle stage onwards, there should be separate schools for boys and girls. In the opinion of the Committee, the period of compulsory education of blind children, when this principle is applied, should begin at the age of six and should continue for two years beyond the limit prescribed for seeing children, i.e., to the age of sixteen, with a view to making up the probable educational deficiency due to their handicap.

15. Priority to totally blind children.—In regard to the two major categories of blind children, (A) totally blind, (those who are unable to count outstretched fingers of a hand at a distance of one yard), and (B) myopic children (those who, due to deficient eyesight, cannot keep pace with normal children in school work), the Committee is of opinion that the children in category (A) should receive prior consideration.

16. Higher standards recommended.—The Central Advisory Board of Education has recommended a general improvement in the standard of schools in the post-war period. In the light of the calculations of the Report, it is probable that the average cost of education and maintenance of a blind child will be appreciably higher than in the present schools for the blind. The Committee feels that the general standard of education in schools for the blind must be raised so that it fits in with the national scheme of education. They are, moreover, strongly of the opinion

that as the education and the welfare of the blind is as much a function of the State as the education of other children, the responsibility must rest primarily with Government.

17. Ease of training the blind.—It should not be thought that the task of training normal blind people presents many difficulties. The younger blind up to the age of thirty are, as a rule, willing pupils. Their anxiety to fill their time with something of interest makes them, indeed, even keener learners than the sighted. They vary, just as other students do, in energy, intelligence, temperament and special abilities.

18. Need of a goal.—As they reach adolescence they naturally begin to weigh the purposes of their training, to enquire what the future holds for them and to explore possible avenues for themselves. At this point they have to be given a feeling of confidence that their education is leading them to a satisfactory goal—a job, a living, an interesting life. If they fail to achieve this, their efforts will flag and morale will suffer.

19. Because of the poor prospects of employment lying ahead of the pupils in most of the schools in India, it has been difficult to establish this basic essential confidence in the pupils. The principal of one school has said quite frankly, "Students in my school deliberately try to fail their final examinations and trade tests, because they fear having to leave the school and go out to attempt to make a living in an unsympathetic world." They are discouraged, too, by the number of old pupils who have had to join the ranks of the beggars.

20. Training of teachers.—The Committee believes that teachers for schools for the blind should receive the same course of training as ordinary teachers, together with some supplementary training to fit them specially for their vocation. They should be on the same scale of pay, but, possibly, with a higher initial salary at the discretion of the appropriate authorities.

21. Any intelligent teacher, given a lead by a competent head, can acquire in a few weeks the special technique the training of the blind calls for—to speak in terms the pupil understands, to realise the pupil sees, not by the eye but by touch, hearing, smell and atmosphere. He should be helped to feel everything that can be brought within his range of touch. He should be taken to the sea shore, to the jungle, to the hills, to factories, to museums—to everything within the range of his hand his hearing and his personal experience. A good globe of the world with land and mountains well raised in natural fashion, and with winding grooves to mark the rivers similar maps of India and of his neighbourhood which he has visited, and a sandpit for practical demonstrations of physical features, are all, of course, invaluable aids to his geography, and the same principle applies to his other studies. The normal blind present no educational problem. They have the same gifts, the same capacity for mischief, the same curiosity, the same love of play their seeing brothers and sisters have; and anyone who presents the normal blind as being peculiar, eccentric or problem children is doing them a disservice. Taught intelligently, they respond excellently, and, given a real goal at the end of their training, they will remain easy and satisfactory pupils.

22. Special schools for children of wealthier and caste families.—The children of better-off parents in India are seldom sent to a school for the blind. The parents feel that it is undignified that their children should attend charitable institutions, or perhaps there are caste difficulties. Sometimes some sort of education is given them at home, but in general they get little, if any, opportunity to qualify themselves for life, which they spend in a narrow atmosphere. Their abilities, too, are lost to the advancement of blind welfare—they, who should be leaders in it. If and when the confidence of parents can be gained, there should be room for several good schools for pupils of this class, Hindu and Muslim, distributed where the need seems greatest. There are special schools in England, for both boys and girls of upper and middle class families, run by the National Institute for the Blind in the manner of private boarding schools. Similar schools are recommended here, when and where they can be organised.

23. Mentally defective and backward blind children.—These have a special claim for consideration as soon as the normal blind have been firmly established. Often the disease which causes blindness also damages the mind and the nervous

system, and consequently the ratio of defectives among the blind is inclined to be high. Nevertheless, many of them respond to training, and can be employed in sheltered industry to their own great happiness, to some small economic value and to the removal of a particularly pathetic type from the begging community. However, as the group of normal blind in need of training and work is so large, and the necessity of building up good standards of performance in the earlier stages of schools and workshops so important, their admission should be deferred until the main system for the normal blind is well founded.

24. When the time comes to establish training for them, the definitely feeble-minded should not be placed alongside normal blind children in the same classes and buildings. It is necessary to make separate provision.

25. Because of long neglect by ignorant parents, or of grave delay in sending them to school—some blind children who may appear to be feeble-minded, are, in fact, only cases of serious mental retardation. They may never catch up with the blind children who have received sound education from the beginning, but, with skilled training in separate classes, they will succeed to a great extent. They should not be placed among the definitely mentally defective.

26. **Deaf mute blind children.**—In a number of schools in America and elsewhere children, heavily burdened by this unhappy combination of handicaps, are being successfully educated. The case, best known to the world, is that of Miss Helen Keller. Training calls for long and patient work, and the undivided attention of a skilled teacher for each pupil. It is highly specialised and costly, and we do not recommend that it should be embarked upon in India until after facilities for the education and employment of the normal blind have been well established. That should be the primary aim during the coming stage of development, specialisations being left until later. Moreover, the difficulties of securing adequate outlets for the educated deaf-blind will remain very great for some considerable time. Experts on both sides have discussed the point as to whether children of this type should be educated in schools for the deaf and dumb or in schools for the blind. The general conclusion is that, in the earlier stages of education, training specially adapted to the deaf may be more helpful to the deaf-blind, but that later vocational training should be given to them on blind lines in view of the fact that blindness is the more serious economic handicap.

27. **The young adult blind.**—Experience has shown that the most generally successful blind person is the one who has lost his sight between the ages of about fourteen and thirty, and who, without any unnecessary delay, has begun a modern training. If his sight has been destroyed suddenly by accident, or by war, he will adjust himself more quickly to his new circumstances than if he has had to endure all the anxieties, fear and nervous strain of losing his sight gradually from some medical cause. He has seen the world and does not forget its appearance; he has had a wider experience than the born-blind; sometimes he has earned his living at a skilled trade and in ordinary competition. He soon adapts himself to his new conditions, and with intelligent instruction and an opportunity for employment, is speedily turned into an able blind worker. If he has the literary background, he should have a short course of Braille and typewriting in association with vocational training as well as games and, if he wishes, music.

28. Modern workshops in India should have a section for the training of these young adults, who have lost their sight after the normal school leaving age.

29. **The older adult blind.**—As the age at which sight is lost advances, the newly blind person is less adaptable. It is accepted in most countries that people losing vision up to the age of forty or forty-five, provided they have normal intelligence and health, are trainable to a new occupation. Though some, especially capable men and women, losing their sight as late as fifty or even sixty, become hard-working, energetic successful blind people, the general rule is that the older a person the harder he finds it to meet such a radical change in the whole circumstances of his life. He has come to depend on his sight so much that he finds it difficult to get the other senses to substitute for it, and often he fails to develop that sixth sense of the presence of obstacles which is such a help to the younger blind.

30. Nevertheless, the happiness and usefulness of the older blind person can be tremendously influenced by a variety of services. Very likely his touch will not be sensitive enough for him to master Braille; but he can learn to type, if he has had a literary education, he can be supplied with a watch to tell the time; and he can be encouraged to continue as many of his former activities as still lie within his power. In the West, if men are in such occupations as the law, the church, business ventures, shop-keeping, insurance or other agencies, writing, teaching, or some outdoor occupations, such as market gardening, poultry farming and so on, they are advised not to be panicked into hasty retirement in the mistaken idea that they cannot possibly carry on such occupations without sight. Though a man over forty may find it beyond his capacity to take up an entirely new occupation, he can often adjust his methods and can carry on with the work he already knows so well.

31. The older blind, too, can be shown how to play with Braille cards, they can be supplied with the "Talking Book" to bring them easy reading, and the years which remain made still interesting and full.

32. Women, losing their sight over forty and fifty, can similarly be encouraged and assisted to continue their household interests, their knitting, cooking, dusting, their gardening and games; they can learn to type and so on. There is no stage in life at which an adequate society for the blind cannot give the newly blind very great service, and so add enormously to the enjoyment of their years of darkness.

33. **The need for the co-ordination of Education and Employment.**—In some countries education and adult employment have tended to go their own independent ways, and particularly as far as schools were concerned, to be unresponsive to new ideas and changing conditions. As we have said, academic achievement was often too much their goal, with too little regard to the realities of the adult employment market. Again, strained relations have occasionally existed between schools and workshops under different managements in the same city, the blind students and workers suffering considerably in consequence. Another tendency has been that when a school has had its own workshop to absorb its pupils when they grow up, such schools have sometimes been inclined to train their young blind only for life in these workshops, and so shut out their more brilliant boys and girls from wider and more interesting lives.

34. **Conferences of Welfare Workers.**—It will be well, in our future work in India, if we keep these experiences in mind. People in charge of the education of the blind must keep in constant touch with the field of adult occupations, changing their courses and the nature of their training to meet the expanding scope of modern employment. Similarly, men who are in control of the vocational side require to co-operate closely with the educationalists. When, too, conferences of workers for the blind are held, while it may be necessary for a few of them to be devoted to limited groups, such as teachers or workshops managers, it is better that most should be open to all types of workers for the blind. Staff members of all branches of the work can then hear and join in the discussion of every phase of blind welfare.

CHAPTER XIII.—EMPLOYMENT

1. **Six main fields of Employment.**—Let us now consider the fields of occupation which have become established in the West for the various types of qualified blind workers. Of those set out in the following list, A and B are the biggest and most important.

(A) **THE SHELTERED WORKSHOPS** administered by societies for the blind, where trainees from training departments and schools for the blind find permanent employment at such occupations as basketry, wicker furnishings, furniture, upholstered furniture, mattresses, brush or rubber door-mats, coir matting, brushware, brooms, netting, knitted goods, woven goods, women's wear, leather wear, shoe-repairing, ships' fenders, rope work, box-making, wire goods, joinery, bead work, envelope-making, book binding and toy-making.

(B) **IN INDEPENDENT OCCUPATIONS AS ORDINARY MEMBERS OF THE COMMUNITY** as lawyers, ministers of religion, university professors, teachers, lecturers, writers, journalists, musicians, administrators, business managers,

masseurs, osteopaths, insurance agents, salesmen, piano and organ tuners, telephone switchboard operators, typists and stenographers, shop-keepers and farmers.

(C) **AS HOME WORKERS.** These are men and women who carry on in their own homes or private workshops the trades they have learnt under a society for the blind, such as knitting, basketry, weaving, shoe repairing, joinery, netting, mat-making and so on.

(D) **IN SUITABLE JOBS IN ORDINARY INDUSTRIAL FACTORIES AT** many of the repetitive operations for which no sight is necessary.

(E) **IN ORGANISED VENDING STANDS,** selling newspapers, tobacco, sweets, etc.

(F) **AS MEMBERS OF STAFF IN BLIND WELFARE WORK** as administrators, school and music teachers, librarians, telephone switchboard operators, typists and stenographers, home visitors, salesmen, Braille printers and binders, domestic servants, gardeners and so on.

2. Public Understanding Needed.—The question is which of these fields should be established first. Success in Fields B, C, D and E pre-supposes a community with a practical sympathy for the blind and a confidence in their real capacity to do the particular tasks they set out to do. This is not yet the case in India, and some time will have to elapse before it will be. It involves standards of education among the general public not yet achieved, while the societies for the blind must also have become highly organised, experienced and well financed before such fields can be safely embarked upon in any wholesale way.

3. Time not ripe for Independent Occupations.—Regarding the very important Field B, the schools have given the following replies to the question, "To what extent do you think young blind people can be trained to go out into independent occupations in the ordinary community?"

Calcutta Blind School, "Generally speaking well trained blind people will find their way into independent occupation in the ordinary community, provided the myth against their employment is removed by their own work and publicity on their behalf."

Behala.

Lighthouse, Calcutta . "A good deal of pioneering work and a long period of strife and persuasion will have to be completed before the blind will generally be accepted for suitable employment in this country."

Kalimpong . . . "Very difficult. Women might be trained as household helps to go out to sick folks, if they had a home to which to return."

Ranchi . . . "Not to a large extent; a few may have sufficient independence of character to strike out into a new line but the majority would require co-operation."

Patna . . . "100 per cent. of efficient blind boys may take up the places of sighted ones."

Allahabad . . . "If well trained they should all be able to obtain proper jobs."

Lucknow . . . "To a very appreciable extent provided there is proper organisation and propaganda and adequate backing by Government."

Rajpur . . . "There is no opening for blind girls unless they can be trained as masseuses for work in a Zenana hospital—or as Bible teachers (if Christian) as six of our girls are."

Amritsar Boys . . . "Indian blind are quite intelligent and they are fit for suitable occupations if chances are given them."

Karachi . . . "To a very small extent indeed can the blind obtain independent employment after training. Those competent in music have best opportunities. Cane work and other manual arts would bring employment of Government and employers of labour took a liberal attitude towards the trained blind and gave them employment without subjecting them to competition with the sighted."

Bhavanagar . . . "Music and bidi-making are two independent vocations which the blind can do in the ordinary community."

Dadar School, Bombay . "To a large extent the blind people from rural districts can be trained into independent occupations such as gardening, farming, poultry-raising, bamboo-basket making, etc. To a very limited extent the urban blind population can go into other occupations and professions such as teaching, professional writing, salesmanship, shopkeeping."

Poona . . . "Blind people of the ordinary community will require a training of at least 8 years in any particular art or craft to make them fit for an independent occupation."

Nagpur . . . "At present music offers an excellent opening to them for independent occupation."

- Poonamallee** "From the experience of this school this seems very limited. There have been very few pupils suitable for higher education or to be trained in occupations in the ordinary community as in the West."
- Palamcottah** "I think that the percentage of blind workers who can gain an independent livelihood is very small. They are faced with several problems. Firstly, the purchase of raw materials and sale of finished goods, particularly in remote areas. Secondly, the undoubted tendency for their work to deteriorate unless it can be supervised at regular intervals. Thirdly, the obviously difficult problem of keeping in touch with the needs and changes in local markets. Fourthly, the necessity of having a certain amount of reliable help, especially in money matters, and, lastly, the difficulties in orthodox Hindu centres."
- Lutheran, Rentachintala** "Can be done, if the inclination to beg is removed. With a hand loom, providing yarn is supplied by a supplying agent ex-trainees could earn a living in their community easily."
- Mysore** "Such of those as have an aptitude for music get themselves benefited by the teaching of the art of music, and they go out as masters of music in the Indian community. They are also frequently requisitioned for music parties."
- Cochin** "Very much depends upon the training given to them and the efforts made by those who are interested in the welfare of the blind to find suitable employment for them."

4. A Considered View.—Dr. R. M. Halder, of the Dadar School, in his recent able survey, "Society and the Visually Handicapped" December 1943, comments on the present employment position in India, "With all respect to our pioneering institutions and without depreciating the work done by individual pioneers and philanthropists, the fact must be stated, in the best interest of our handicapped brothers, that no proper facilities as prevail in other countries have been so far given to them in order that they may attain economic independence and social recognition. Doubtless, some visually handicapped individuals are holding their own in society, but these exemplary men have succeeded chiefly because of their own initiative and tenacity of purpose. The help offered to them by individual institutions and society is indeed small in comparison with their personal efforts. But the central thesis remains the same, that practically no facilities for vocational training, employment, placement and after-care are offered by our country to the mass of our visually handicapped brethren, on a national basis."

5. Similar Difficulties in other Countries.—It will be realised that it is one thing to train the blind—it is quite another matter and much the more difficult task, to secure them permanent employment. The present situation in India, with its thirty-two schools and almost no provision for employment, has been common to the evolution of blind welfare in all countries. The same point was reached in England about 1830-1840, regarding which the League of Nations Report on Blindness says, "The founders of these schools aimed at providing education and training which they hoped would enable blind pupils to pass out of the school and earn their own living. Insurmountable difficulties, however, were experienced in placing the pupils after training, and the schools found themselves forced by the logic of events to go a step further and provide workshops for the employment of their old pupils. The earliest workshops were formed as adjuncts to schools."

6. Sheltered Workshops the Remedy.—The school is, therefore, the pioneer unit. To it is added a workshop. It is then able to assure its pupils not only of education, but of permanent work as a logical sequence to that education. With that as the firm foundation to a society for the blind, it can now with greater confidence and competence begin to expand in the other fields of employment. Pupils of exceptional ability, personality and good appearance can be given special training for independent occupations, though it will be necessary to create an after-care fund and organisation to give them a start, and the occasional assistance most will need; opportunities may offer of placing suitable manual workers at repetitive jobs in sighted industry; a home workers' scheme, based on the workshops, can also be put into operation; and possibly, too, if local conditions allow, newspapers, tobacco or dry goods stands on the American and Canadian pattern can be built up. Music and massage departments can be added, the local Frailie library set up

a centre for the social life of the blind created, and so on—and thus the unit will grow until it is complete in all modern departments.

7. We believe, therefore, the advance to the sheltered workshops stage is the immediate practical step, for the following reasons :—

(a) The vast majority of the blind belong to the poorer and less intelligent section of the community ; and this step offers the most immediate good to the greatest number.

(b) It is the speediest way to create an outlet for the blind sufficiently attractive and remunerative to compete successfully with the old system of begging.

(c) It is the least costly way of meeting the situation.

(d) The school-cum-workshops is the best basic unit from which to branch into the many other fields of employment and blind welfare.

(e) The blind workers will be under proper supervision, ensuring the production and sale of only first-class articles, so essential to the growth of public confidence in the capacities of the blind.

8. Existing Schools Favour Workshops.—The societies are, in fact, themselves well aware of the wisdom of this policy ; and many of them have suggested it. The following are their replies to the question, "Do you favour the establishment of Workshops for the permanent employment of adult blind people, with or without living quarters for wives and families, as the best solution for the bulk of the young adult blind ?"

Behala	"Yes, with living quarters."
Lighthouse, Calcutta	"I think that the establishment of sheltered workshops will help a considerable number of blind persons."
Kalimpong	"Yes, I am strongly in favour of workshops, and sale shops, because :—1. The blind have, generally speaking, no capital with which to buy materials. 2. They have also no means of organising sales. 3. Also I am in favour of the cottage system with gardens in addition to workshops. Families can live better under these conditions."
Kanchi	"Yes, I think in large cities, workshops are the best solution where carpet-making, etc., might be attempted ; married men to live in their own houses and unmarried in hostels. The shops might receive goods for sale from the districts."
Katna	"Yes, with quarters for them and for their families where necessary."
Khabad	"Yes, decidedly."
Kanpur	"Yes."
Kanpur Boys	"Yes. Family quarters attached to the workshops will make their work easy, and it is essential if the standard of morality of the blind is to be kept."
Kanpur	"Yes. I would prefer workshops with living quarters."
Kanachi	"It is the only solution of the problem in India at present. Living quarters, too, will have to be provided in most cases."
Kanpur	"Yes."
Kanpur School, Bombay	"The best solution for the bulk of young adult blind seems to be the establishment of workshops, sheltered and subsidised to the extent necessary, with living quarters for wives and families available if desired by the workers."
Kanpur Home, Bombay	"I do favour the establishment of workshops with living quarters for families near the workshops."
Kanpur Home, Bombay	"A workshop with living quarters for wives and families, will solve not only the economical problem of blind men, but also their social and emotional problems. It will be a heaven on earth for the blind."
Kanpur Memorial, Bombay	"Yes."
Kanpur Women's Home, Bombay	"We definitely favour the establishment of workshops."
Kanpur	"Under the present circumstances, I do not favour the idea of establishing workshops for the permanent employment of the young blind as they have not demonstrated a sense of responsibility in the existing institutions where they had to undergo their training. Besides, their number is not sufficiently large at present to justify the need contemplated here."
Kanpur	"Yes, without living quarters for wives and families."
Kanpur	"A central institution should provide workshops with hostel accommodation for unmarried workers, and houses for married ones."

Lutheran Mission, Rentach- "Yes, with living quarters for trainees. I do not favour marriage, and thus create another problem of support."

Mysore "The establishment of workshops has not been possible so far, as the majority of the blind have not shown any aptitude for industries."

Cochin "This should be resorted to only in the case of poor blind people."

9. Principles to be applied in a Workshop for the Blind.—The first of these is that it should be run as nearly as possible on the same lines as an ordinary factory in which seeing workers are employed. For this reason the workshop should be definitely apart from the school. An establishment which remains part workshop—part school can scarcely hope to achieve manufacturing proficiency. Nor is a schoolmaster the right type of man to manage a commercial workshop—his job is teaching, not manufacturing. In a sighted community we do not have establishments which combine school teaching with ordinary commercial undertakings; and in our blind welfare work, too, we must avoid such unnatural unions.

10. While a few excellent workshop managers have graduated from the training side, it is well in starting industries to see a manager who has already proved himself a capable supervisor of an ordinary workshop, preferably one following some handicraft. He will then be familiar with factory practice the keeping of stock sheets, the buying of raw materials, the best organisation of his workers, the proper finish of goods, invoicing, prompt delivery and so on. If he is intelligent, a short course of instruction in handling blind workers will soon show him how to adjust his methods to meet their particular circumstances.

11. Some jobs the blind worker cannot manage—for example, applying paint; nor is he good at making the frame of a cane chair, but he can fill it in beautifully. Often partially blind men can do some jobs the totally blind cannot; but it is always necessary to employ a percentage of sighted foremen and workers in a workshop for the blind. They should be highly skilled men, preferably drawn from fully qualified workers in their particular industry, and not from the school side of blind welfare. There are exceptions, of course; and occasionally totally blind workers show remarkable ability at execution, designing and instruction. Sometimes a workshop is in a position to do a good turn to people with other disabilities, such as placing skilled cripples or deaf men in posts as sighted assistants; but they must be skilled craftsmen.

12. The Canadian National Institute for the Blind has among its factories, one employing 45 blind women, devoted to making all kinds of women's clothing and other types of cotton and artificial silk goods. In its early years it employed about one sighted woman to every five blind women, most of the latter operating high-power electric sewing machines. As experience was gained, the number of sighted workers was increased until it somewhat exceeded the number of blind women; and the factory now shows a profit. The reason for this is that formerly it was unable to turn out many of the goods wanted by the market. Wholesale buyers for large shops were averse to splitting up their orders, allowing the Canadian Institute to pick out the articles that suited it, and then having to find another factory to complete the balance of the order. Under the new system the Institute's factory can, without hesitation, undertake a bulk order covering the full range of goods normally required by this particular trade. Admittedly, in some articles only 5 per cent. of the labour involved is done by a blind woman, but in other articles the proportion reaches 95 per cent. It is an interesting example of the application of modern commercial practices to the blind workshop.

13. The choice of trades to be carried on requires careful weighing. The trades must be suitable both as occupations for the blind and to the demands of the local market. The accepted field of handicrafts, now followed in most countries, offers a fair selection—basketry, weaving, brush-making, broom-making, mattress-making, knitted goods, mat-making, box-making and so forth. It is not sound practice commercially for a workshop to embark on all, or nearly all, these trades at one and the same time. The managements of workshops are asked by scores of visitors "Why don't you make so-and-so? I've seen it made in other blind workshops." If this argument were applied to ordinary factories, we would find the same factory turning out motor cars, soap, bottled fruit and newspapers, or some such mixture. The fewer lines concentrated upon the better. Either basketry or brush making,

for example, fully developed in all, or many, of their types can employ, in a good business centre, a large body of workers. The fewer trades a workshop embarks upon, the less will be its overhead costs in trade experts, foremen and selling. Run on a commonsense basis, a workshop for the blind can achieve the position in the commercial life of a city when it is no longer thought of primarily as an "institution" for the blind but as, for example, the chief source of brushware supplies.

14. Workers are best paid under a piece-work or bonus system. Of necessity the quantity of their individual outputs varies much more than that of sighted workers; and they differ too, of course, in energy and willingness to apply themselves. Taking the average production of a skilled sighted craftsman at 100, trained blind workers will range from 20 for slow and handicapped men, from 50 to 70 for the average skilled blind worker, and very occasionally to 100 for the exceptional man. Under these circumstances fixed wage systems usually breed discontent. If the same rate is fixed for all workers, some men will slack and produce few goods. The willing worker will then complain because he is getting only the same rate as the lazy fellow. If individual wage rates are assessed according to each man's average ability and output, the lower paid man will complain, never being willing to admit that other men are turning out more and better goods than he is. In an ordinary sighted factory, if a man is lazy and inefficient, the management promptly dismisses him and employs another man in his place. This form of discipline is not readily open to a workshop for the blind. It has no wish either to be hard on a blind worker or to swell the beggar population by dismissals. So a fair piecework system is the best—the worker earns what he will. The piecework system must be fair, and together with pension, Augmentation of earnings or other compensation for the handicap of blindness, guarantee a minimum living wage. In the face of existing industrial conditions in India—uncontrolled production, uncontrolled wage rates, and keen competition from the village homemaker who has few overhead costs, it is admittedly difficult to pay more than what seem meagre wages as a reward for many hours of effort. It will be well if the workshop's annual account is open for public inspection, and also that it should be explained to the workers—so much money expended on raw materials, so much as wages to the blind workers, so much for overhead and selling costs.

15. It is seldom that a workshop's account does not show a steady annual loss even in the best-run establishment; and this in spite of such contributory factors as freedom from rates and taxes (which is usual), the capital cost of building, site and plant are gifts and carry no obligation to meet interest charges, and other privileges. The reasons for the loss usually lie in somewhat heavy overhead costs for management, supervision and selling, and to the workers being paid rather more highly for the actual labour they give than sighted workers are; and because of various minor concessions and easy conditions given to the workers. It is best that the workshop's trading account should concern itself only with truly industrial income and expenditure. In a separate account, under some such title as "Blind Workers' Benefit", should be shown all items of expenditure of a beneficial and non-commercial character, such as sick pay, holiday pay, gift clothing, any board and lodging and quarters which are given below cost, gift tobacco, medicines, etc., together with such sums as are paid in the form of subsidies on, or augmentation of, wages as compensation for low earning power.

16. In most modern workshops some compensation is paid to balance limited earning power. It sometimes comes from the societies' philanthropic funds, sometimes partly that source and partly from public sources (local rates or government contribution); but the trend is steadily towards public authorities assuming complete responsibility for this "augmentation". Nevertheless, the society itself usually extends some additional facilities which lower living costs to its blind workers—housing schemes, hostels with cheap rates, etc., while concessions from outside sources—free wireless licences, free transport on buses, tramways and trains, concessions in admission rates to the cinema, and so on, form other compensations to low earning power, and express general public sympathy in a practical form.

17. The picture given by the National Institute for the Blind, London, of employment in Russia is typical. "While a number of special workshops are maintained, mainly of 100–200 workers, efforts are also made to incorporate the blind in the ordinary factories. Here special concessions are frequently made for them by the management and the trades unions, e.g., the provision of free meals in the factory

restaurants, permission to purchase certain goods at advantageous prices and special allowances of produce from the factory farms and market gardens. It is stated that the society has the vigorous motto : ' Keep in step with the sighted ' ; and no doubt it is in accord with this challenge that attempts are made to find places for the blind among their sighted fellows in all appropriate enterprises."

18. The spirit behind these developments is one of contract—the blind on their part ask for, and are given, the opportunity to develop their full capacity to produce practical services of commercial value to the community. It is recognised that it is difficult for them to earn a full living wage ; but, if they do their best, both government and philanthropic public find pleasure in contributing what may be necessary to give them as good a living as their sighted fellow citizens. This attitude is working well in a number of countries where the blind have achieved a position where they hold their own socially and, many of them, economically.

19. **Workshop Trades in India.**—The Madras Association's School at Poona-mallee shows the greatest industrial development of any society in India, its trades being basketry and weaving. The Mission to the Blind in Burma had also built up sound commercial industries—cardboard box-making, weaving and basketry. The Church Missionary Society School at Palamcottah, though not undertaking to keep its trainees in permanent employment, has a considerable output in basketry and weaving. The S. P. G. Mission School at Ranchi has achieved a satisfactory market in basketry. The N. S. D. Industrial Home for the Blind, Bombay, has embarked upon cane furniture, string bags, wirework, and pill boxes. The Sharp Memorial School in Dehra Dun has created a market for knitted goods. These are the beginnings of commercial production, and give promise of wider fields of employment.

20. Other trades at present taught in the schools include sisal hemp work, book-binding, envelope-making, tailoring, wickerwork, silk bag-making, newar-making, doormat-making, carpet-making, broomstick-making, and bidi-making.

21. The following trades have been suggested as possibilities by the existing societies :—hawking, newspaper selling, canvassing, insurance agency, leatherwork, metalwork, poultry-keeping, journalism, law, translation work, making camouflage goods for the Army, secretarial work, salesmanship, farming, machine-knitting, cooking, tat-making, moulding bricks, laundry work, paper packet-making, tape-making, grinding and husking corn.

22. In establishing " sheltered workshops ", the most immediate practical step, with the co-operation of each of the existing schools, is to attach to it an effective workshops with the necessary quarters and grounds. Some of the schools have sufficient land and, in a few cases, part of the buildings to permit of the creation of such a department quite separate from the school. In other cases a new site will be needed. The schools which appear to have adequate substance for such an addition are the Calcutta Blind School ; S. P. G. Mission Blind School, Ranchi ; Blind School, Patna ; Sharp Memorial School, Dehra Dun ; Institute for the Blind, Amritsar ; Emerson Institute for the Blind, Lahore ; Ida Rieu School for the Blind, Karachi ; Dadar School for the Blind, Bombay ; the N. S. D. Industrial Home, Bombay ; Victoria Memorial School for the Blind, Bombay ; Poona School for the Blind ; Blind Boys' Institute, Nagpur ; Victory Memorial School for the Blind, Poonamallee (already established) ; School for the Blind, Palamcottah ; School for the Blind, Baroda State ; Home for the Blind, Bhavnagar ; School for the Blind, Bhawalpur ; and the School for the Deaf and Dumb, Mysore. The remaining societies will require strengthening in their position as to property, finance, methods or constitution before a substantial permanent workshops can be linked up with them. A number of the first-mentioned, too, will require to modify their syllabi and teaching methods to key in with the practical needs of the employing workshops.

23. **Marketing the Products of Blind Workers.**—The goods produced by any workshops for the blind, or individual blind worker, must be up to standard commercial quality or better, and priced at current market prices. At one time, in the west, the products of the blind were generally of a low standard—shapes poor, designs old-fashioned, colours crude ; while on sympathetic grounds, prices higher

than the current market rates were asked. Purchasers may pay a higher price once or twice for articles they do not particularly like ; but no permanent market can be built up on such a basis. Commercial principles of quality, prompt service and costing are essential. Then only may special consideration be expected.

24. Wares are marketed in various countries in the following ways :—

(a) *Government and Local Authority Contracts.*—Governments and public authorities usually place all the orders they possibly can with accredited societies for the blind.

(b) *Contracts with Railway, Shipping, Banking, Hotel and other large Companies.*—Provided quality is consistently maintained and regular delivery assured steady orders can usually be secured from these and similar large business concerns.

(c) *Retail Shops.*—If the class of goods is suitable and adequately varied, a retail shop either on the Society's own street frontage or in a good position in the city, is a useful asset. A shop can be run by a partially blind person trained in salesmanship with the assistance of voluntary workers.

(d) *Blind Salesmen.*—Capable, reliable, good-looking blind salesmen, going from door to door, working on wage or commission, are often very successful. They sell on sample, and deliver the goods later, or alternatively assisted by a sighted escort, take round a truck with a good variety of wares on board.

(e) *Shop Window or Counter Displays.*—These can usually be secured for a week or a fortnight, now and then, from the leading shops of a city, and goods sold from them.

(f) *Stalls of goods* arranged at fairs, exhibitions, race meetings, sports meetings and so on, and run by voluntary organisations.

(g) *Direct sale to the wholesale trade* in the ordinary way of business.

(h) *Co-operative Marketing.*—In Britain a number of workshops have joined together in a group to sell their products through one co-operative agency. In America, during the war, the workshops throughout the country appointed one agency, known as the National Industries for the Blind, to contract for and distribute large defence orders for war supplies. Such developments bring bigger and steadier orders and avoid what has at times occurred, cut-throat competition between blind workshops for the same order.

25. **The Field of Independent Occupations.**—When blind welfare develops a little further, when the seeing public has been educated as to the capacities of the blind, the training of the more capable students for carefully chosen independent occupations should be proceeded with—professions, business, massage perhaps, shop-keeping, music, journalism, farming and village handicrafts, and possibly others.

26. Great caution has to be shown in selecting these young men and women. Their fight to gain a place in the sighted community is going to be a tough one, calling not only for ability and high qualifications, but for great strength of character and endurance. Good appearance and a fine physique will also help them. They will meet with much discouragement. Competition will be unfair, for seeing competitors will at times descend to spreading rumours and stories detrimental to their work and character. In the west there has been too, a tendency at times to put 'mamouli' young blind men through matriculation and university courses, only to find, too frequently, that their hard-earned B. A's, M. A's, LL.B's and Ph. D's., and often, too, very high musical degrees, bring them no living, and that they would have been better off as craftsmen. This is not a condemnation—it is a caution always to keep in mind the main aim—the ultimate satisfactory employment of the blind.

27. **The Need for Organised After-care.**—Long experience has shown that a society will waste most of the effort and money expended on a young man for such occupations, unless his parents, or the society itself, can spend from several hundreds to several thousands of rupees on launching him on his enterprise. He will need his equipment—typewriter, Braille writer, tools, a good outfit of clothes, money to spend on advertising, money to keep him during the waiting period while his business builds up, housing, business premises, stock, telephone and so on. To get a satisfactory start is his greatest hurdle. If adequate financial aid is not forthcoming, he will stand little chance of survival. A society, therefore, which sets out to train men

and women for active jobs in the community, must see to it that it has an after-care fund to provide money for these purposes, and an intelligent after-care officer to seek out openings and to act as adviser and friend.

28. Such an after-care department usually carries out most of the other activities of ironing out the endless personal problems involved in blind welfare. Many students and trade apprentices will need some special assistance during their training period. To a grown man the sudden loss of sight usually brings a packet of trouble. He has heavy medical expenses, he has lost his job and does not know how he is going to support his wife, and his three or four young children. He may have to move to a new locality if he is going to train or take up some other occupation; and to help him overcome these difficulties, the society must assist him.

29. **Home Workers.**—These are men and women who carry on, in their own homes or private workshops, the trades they have learnt in schools for the blind, or from home teachers—knitting, basketry, weaving, shoe-repairing, joinery, netting mat-making and so on. Many work steadily a full working day and turn out high class articles which find a ready sale. Some handicap themselves by cutting short their hours or lowering the standard of their products. A society for the blind usually provides raw materials at cost, collects and inspects the finished goods and markets them. The system is apt to be expensive from the administrative angle, and inferior goods may be turned out unless supervision is efficient. On the whole it would be unwise to embark upon homeworkers' schemes in India, until the workshops themselves are on a thoroughly sound footing.

30. **Music.**—The popular belief that blind people are naturally musical has do foundation in fact. The blind are no more and no less musical by nature than any other group; but, when they have the talent, they should be given every chance to develop it, not only as a recreation, but as a profession. Their training should be of a high order, for the public will not employ performers because they are blind, but because they are first-class musicians.

31. At the same time music is the principal art open to blind people, so that many whose intrinsic talent may be limited will wish for every opportunity to develop it to the full for their own enjoyment. Schools for the blind in the West have tended rather too much to confine their blind pupils to classical music, in which they have admittedly secured the highest places in the academic sphere. A few have made brilliant careers as organists, pianists, violinists, singers and composers, but the bulk have had to content themselves with spasmodic and ill-paid employment. The schools used to look askance at popular commercial music—the dance band, the saxophonist and the comic entertainer—but where development in this direction has taken place it has shown most promising results. In India there are probably places for both the classical artist of outstanding merit and for the popular entertainer—the player at weddings, ceremonies and jovial parties.

32. The schools express themselves freely on this subject. They say that, in their opinion, radio broadcasting should grant the blind a special place. Directors of broadcasting are usually ready to give amateur concert parties from blind schools one or two engagements a year on the grounds that, because the performers are blind, the show has novelty and special interest. But there is a very definite limit to the duration of the novelty. Once listeners have accepted the fact that blind people can sing and play, they begin to look for high class entertainment; and from that point on, it is the performer's capacity alone, blind or not blind, which can gain and hold for him a high and permanent place.

33. **Bands and Orchestras.**—For the somewhat less brilliant, but nevertheless good, performer, small bands should provide an excellent outlet. In every large school and workshops, there should be ample talent to provide at least one good band, and a number of the existing schools have already done this. A band requires to be well controlled. Apart from being properly trained and equipped, and with a wide repertoire, the members should be of good appearance, clean, neatly uniformed, and their eyes not unsightly. They must also be of good character and habits, as well as punctual and courteous. They should be merry and bright when the occasion demands it, and up with the times in popular music. Some schools have mentioned that a band of blind players would not be acceptable in their part of the country, as

blind people are looked upon as inauspicious on important family occasions. Perhaps with a fine standard of performance, this objection might disappear.

34. Other musical openings are available such as music teachers in schools for the blind, teaching in private houses to girls in purdah, and temple music.

35. In answer to the question, "What are your views on the possibilities of bands of blind musicians, playing at marriages, ceremonials and parties, being a possible outlet for employment?" schools have sent the following replies:—

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| Calcutta Blind School,
Behala. | "This is a possible source of employment and has been tried with some success in Calcutta, but care must be taken that such bands are not treated as beggars, their dignity should be upheld by levying a regular fee." |
| Lighthouse, Calcutta | "I think that an experiment with bands of blind musicians will bring encouraging results. Blindness should not figure as a striking handicap in this type of work." |
| Kalimpong | "Music, as a permanent employment, is not of any use here. They might get employment occasionally, but it savours of begging. There are blind beggars in the neighbourhood who make their living by playing as they beg. One of these was taught a trade but went back to his begging." |
| Allahabad | "This is a very great possibility and should have a big future." |
| Lucknow | "We think this a very practical suggestion which will go a long way to promote the cause of the blind, and at the same time be lucrative." |
| Amritsar Boys | "It is a good employment and provides a fair field for the blind." |
| Lahore | "A band of blind musicians can derive a good income and it is a good and possible outlet for the employment of blind persons. We have an orchestra of the blind of this Institute and we have had a few opportunities to broadcast our music from the All-India Radio Station, Lahore. Our orchestra has always been an attraction to the public at the exhibitions held at Lahore and Rawalpindi." |
| Karachi | "We have not yet attempted a band of blind musicians, but I am sure it will succeed if properly organised. In my province, music admits of another outlet, specially for Hindu boys if they train themselves in simple Sikh music to play as small bands, or even two at a time, at ceremonials and in the temples." |
| Bhavnagar | "We do send out our blind orchestra at marriages, ceremonials and other parties. We charge Rs. 10 per hour for it." |
| Dadar School, Bombay | "We have a feeling that bands of blind musicians, playing at marriages, ceremonials and parties have little prospect economically. We believe that proficient individual blind musicians or singers would have good financial opportunities in cinemas and radios." |
| Happy Home, Bombay | "Yes, if we have enough funds and can gather instruments and work up public interest so that they will invite our boys." |
| Industrial Home, Bombay | "It is a good outlet indeed, depending for its success on our beating down the superstition that it is a bad omen to employ blind men on an auspicious occasion like marriage." |
| Victoria Memorial School,
Bombay. | "In India specially, owing to the belief in omens, and the gloomy aspect presented by the blind players, there are only remote chances of their earning from playing at marriages and on other happy days." |
| Blind Women's Home,
Bombay. | "It should be encouraged. There are blind student musicians in Bombay who actually give concert performances in public halls." |
| Poona | "There are great possibilities for bands of blind musicians and also for parties performing orchestra programmes in wedding ceremonies and festivals and social parties. It would be a source of income to them provided they are properly trained and wide publicity given to their work." |
| Nagpur | "This is an excellent avenue for their employment and should be widely encouraged and popularised." |
| Poonamalee | "It is not a profitable occupation in this part. Indian music is taught in school in the Education Section, as recreation only, and not to support their earnings, as otherwise it is apt to become a means of begging." |

- Palamecottah "I believe that there are definite possibilities. It is a scheme I have constantly advocated. There are certain essentials to give a real promise of development. Firstly, only those with genuine musical ability should be accepted for a thorough musical education. Secondly, and of equal importance, only those of thoroughly reliable character should be encouraged to take up this profession. They should not have the mannerisms which so often mark the blind man out, and they should have the ability to mix freely with others, freedom and ease in movement, personal cleanliness, and good manners. Thirdly, they should be of a type who would be welcomed to any house, class or community. Fourthly, their repertoire should be adequate. Failure in any one of these respects would do no good to the cause of the blind as a whole. Blind musicians must win their way by sheer merit, and not through any sense of pity."
- Lutheran Mission, Rent-achintala. . . . "It is entirely possible."
- Mysore "Bands of blind musicians playing at marriages, ceremonials, etc., have been very successful in our State."
- Cochin "Bands of blind musicians playing at marriages, etc., I consider to be a good outlet. But this should not be lowered to a begging standard."

36. In Melbourne, Australia, and Auckland, New Zealand, (and probably elsewhere) orchestras, military bands and dance bands on a professional basis contribute substantially to the life of the societies for the blind; and their tours and professional service have the effect, not only of giving direct employment, but also of stimulating money contributions to the societies, and the sales of their workshop goods.

37. Employment of the Blind in Ordinary Factories.—During the past twenty, and especially the last ten years, the placing of blind men and girls in ordinary factories has made steady growth. During the war, helped by labour shortages, substantial numbers of blind workers were employed on war industries in Germany, Britain, Canada and the U. S. A., and no doubt elsewhere.

38. In Britain, for example, the number employed in ordinary factories in October 1943, was 1,228, of whom 112 were war-blinded men placed by St. Dunstan's and the rest civilian blind placed by the societies. Generally speaking, the wages they earn are higher, in many cases much higher, than what would be obtained in sheltered employment, and they have shown their capacity to carry out at least 325 distinct factory operations. In modern industrial plants there are many simple repetitive jobs which can be done just as easily by a blind as by a sighted worker.

39. The late Mr. Edsel Ford, writing early in 1943, thus outlined his own experience and put the modern point of view extremely well.—"A good many firms in this country (America) have always known that individuals, impaired physically in some respect, frequently have perfectly adequate capabilities for some jobs. Now, under the prompting of a man-power pinch, recognition of the usefulness of the physically handicapped is spreading to all the country's industries and services.

40. "Our company is one of those which has for a long time believed in and practised the utilisation of physically impaired workers. Today we employ 1,208 totally or partially blind men; 111 of our employees are deaf mutes. There are, in addition, 135 who suffer from epilepsy; 91 with but one arm; 3 with both arms amputated; 260 with one arm crippled; 157 with one leg amputated; 101 others suffering from crippled conditions of the legs; 10 with both legs amputated; 139 with spine curvatures; 322 with organic heart ailments. Altogether, 11,163 men in various stages of disability are receiving full pay. The blind men receive from 95 cents to \$1.15 an hour. (From about Rs. 3-8-0 to Rs. 4-5-0 at 1943 rate of exchange). These figures are for the River Rouge industrial area. One of the sightless men has been with the company 24 years, and is now 74.

41. "No company regards such employment as charity or altruism. All our handicapped workers give full value for their wages and their tasks are carried out with absolutely no allowances or special considerations. Our real assistance to them has been merely the discovery of tasks which would develop their usefulness. Their fellow-workers are highly co-operative."

42. In June 1943, the Society of Motor Manufacturers and Traders of Great Britain appealed to all members of the motor industry to consider the employment of

war-blinded and other blind people in their works. The Society stated, "It has been ascertained by investigation of motor establishments that blind persons can be efficiently employed on bar capstans, trimming, radiator and other assembly and inspection, work. Other suitable less skilled jobs are : broaching, tooth-rounding, jig-drilling, Duplex millers on con-rods, and handpower drilling and riveting."

43. Many other factory operations at which the blind have already proved both their skill and their capacity to maintain the same average output as sighted workers, could be quoted. For instance "4,000 collars and half-collars for bomb fuses, diameter 5/16ths inch were gauged and inspected by blind workers without a single fault and without the intervention of the sighted supervisor." There are such jobs as packing confectionery, bottled goods, electrical and radio equipment, numerous assembly jobs, the operation of automatic bag-filling plants, nut-threading machines and so on.

44. **Factory Placement a matter for careful Organisation.**—This avenue of employment, however, cannot just be left to chance. To be successful it must be under constant supervision by a "placement officer" acting on behalf of the society for the blind. The officer, who should be a blind man of considerable character and mechanical skill, should make a survey of a number of factories in his area to discover the particular tasks which would be clear sailing for a blind operative. Having gained the consent of a factory management to the employment of so many men or women, he would then select them. He would need to be satisfied that they could do the job, that they would stick to it under the same hours and conditions as the sighted labour, that they would be respectful to and co-operative with the foreman and management, and so on. Many such plans have come to naught because of the blind worker failing to fulfil these conditions. If the first blind worker, so employed, fails—it may be because he is disrespectful to the foreman, because he is consistently unpunctual, or just because he is not sufficiently skilful or quick, the management does not blame that blind individual—it blames the whole blind community, lock, stock and barrel, and swears it will never again have a blind man on the premises.

45. When a blind operative has been placed in a factory, it is not the end of the "placement officer's" job. For the first month he calls once a week, then once a month, just to see that all is going well, both for the worker and for the management ; and, if a blind worker loses that employment, it is the officer's task to find another to take his place.

46. Placement of blind workers in factories is, therefore, a delicate matter, especially in the beginning. Nevertheless, it offers a big potential field in India, as soon as the services of our societies have been carried to the necessary stage.

47. For the blind to gain admission into sighted industry many difficulties have had to be overcome—the deep scepticism of the company managements, the problem of the blind employee getting from the gate of the plant to his bench, the attitude of insurance companies who thought an undue number of accidents would befall the blind, opposition by the unions and so on. These have all been surmounted, and now the belief is held in some quarters that skilled blind men and women have earned themselves and their community a permanent status as factory operatives.

48. **Vending Stands.**—Recently in some countries, notably Canada and the United States, societies for the blind have set up special departments which place suitable men and women, after training, in newspaper vending stands, cigar stands and dry goods or even refreshment stands, in large government offices, business houses and factories, where, well managed, blind salesmen earn very satisfactory incomes. Federal and State Governments in Canada and the United States, and many local authorities, have given the societies for the blind special privileges to have these stands in their offices and public buildings. The societies erect and equip them, and employ the blind workers on wages *plus* commission.

49. **Employment of Blind Staff by Societies for the Blind.**—It should be a first principle in all organisations for the blind that *wherever possible qualified blind men and women* should be appointed to the maximum number of posts in the organisation.

If societies for the blind are to expect the general public to employ blind people, they must themselves set an example and demonstrate their practical capacity in administrative and other posts.

50. Note must be taken, however, of the underlined phrases 'wherever possible' and 'qualified blind men and women'. There are certain posts which blind people cannot fill—for example, matron, car driver or painter; while in administrative offices, schools and workshops there must of course always be a proportion of sighted assistance. Again, blind people are apt to interpret this principle to mean that they, just because they are blind, should be appointed to posts for which they are but poorly qualified or not qualified at all. The same principles should apply to their appointment as to anyone else's. They should be qualified by education and experience, personality appearance and background, and be able to do the job efficiently. Otherwise, not only will the general performance of the employing society fall, but the good name of the blind will suffer. When a blind man fails in his post, it is almost inevitable that it is his blindness, and not his individual lack of qualifications that is blamed.

51. And so, though the employment of qualified blind people must be a first principle, it must also be accompanied by practical considerations and careful selection. Upon blind people, so appointed, rests a high responsibility—that of proving themselves and of building up and maintaining the reputation of the blind for competence and integrity.

52. Qualified blind people can and do fill the following posts with ability. The chief executive position in any society for the blind. If a first class blind man fills this post, he is in a much stronger position than a sighted man. He speaks the language of practical experience which the blind people under him can understand and to which they listen with much more conviction than to the words of a sighted head. To them, he is a standing example of achievement. Nor is he, on his part, fooled by pretended difficulties and excuses. The blind director, too, can put the case and the needs of the blind more convincingly to the sighted public and the government of his area. Beyond this, he is usually a sincere and earnest disciple for the advancement of the blind, and will work long and hard for the betterment of his people and his society. Most big advances in blind welfare are, in fact, due to the initiative, the determination and the hard work of blind leaders of the blind. Sighted people have helped, and do help enormously, and blind people could not get on without them, but frequently there is a noticeable difference between a society presided over by a capable blind man and one where the head is sighted. In the former the blind are confident and have a sense of equality and capacity—in the latter, though well cared for, well treated and well taught, they are apt to have an inferiority complex born of the feeling that they are an afflicted section of the community, different from other people. They are being "cared for" as an abnormal group. If, therefore, a first class blind man is available, the society should have him as its head; but he must be First Class and no mistake. If he fails to deliver the goods, he should go.

53. A proportion of the teachers in the schools can be blind—more especially in the higher classes (small children require a great deal of correcting of abnormal movements and postures), as music teachers, as lecturers and as coaches for university students. There is usually room for one or two blind stenographers in the society's office, and if it is large enough to have a telephone exchange, it should be handled by a blind telephone operator. Almost the entire Braille and talking-book library service can be carried out by blind librarians. In a Braille publishing house most of the setting up, correcting and binding is done by blind operatives. The sales representative for a workshop for the blind, or the salesmen in the society's shop, can be capable blind men. Exceptionally good men can be trade instructors, though any but the best will find it difficult to discover whether their pupils are making well shaped articles. There is no fixed rule in this regard. Some men have shown themselves to be geniuses in teaching massage, poultry farming, carpentry, basketry and weaving.

54. The positions of home visitors, welfare officers and travelling representatives can best be filled by really capable blind men and women. All blind people in the foregoing posts should be expert in both Braille and typewriting, and the more

accomplishments they have in the way of music, games of all kinds, capacity to speak and general adaptability, the better. They will need to keep records themselves. The blind librarian must prepare his catalogues of books and readers in Braille on index cards. The telephone operator records on her Braille card index all numbers commonly used by her office. The stenographer will want a similar index of addresses, and so on.

55. In domestic work about residential quarters some part of the cooking, washing, cleaning and gardening can be carried out by blind people.

56. This does not complete the list of possible openings for employment within a society for the blind. Depending upon special abilities and the particular circumstances of individual societies, other posts will be discovered by competent heads in which blind people will give excellent service.

57. **Women in employment.**—We have spoken mostly of employment for blind men; but in the west women share with men all six fields. In workshops they are employed in weaving, knitting, light basketry, bead-work, clothing and leather-work. In the field of independent occupations they find posts as masseuses, stenographers and typists, telephone operators, music teachers, performing musicians, receptionists and domestic servants. They are active workers, too, under home workers' schemes, in employment in ordinary industry, in vending stands and on the staffs of societies for the blind.

58. Blind women have another field for wide and useful service—the home. In all parts of the world they stand much less chance of marrying than blind men do; but there are, of course, many women who have lost their sight after marriage. Sometimes, without instruction from a society for the blind, they carry out their household duties with admirable efficiency; but, taught and encouraged, large numbers of them can and will be most useful, and there are few of the household jobs they cannot manage, including cooking. It is recommended that, where the circumstances are suitable, blind girls and young women should be taught home duties, including some knowledge of hygiene and mothercraft which may be helpful to village life when they return home.

59. **Conclusion.**—This survey of the fields of employment is by no means exhaustive. The capable blind person, like his able sighted brother, can fill many roles; and the whole list of all the occupations individually mastered would be a long one—from cattle judges to research chemists, from heating and ventilating engineers to heart specialists. The measure of the success of blind welfare, however, is not the few brilliant individuals who can be quoted, but the number of ordinary, every day blind who are busy and happy, earning a substantial part of their own maintenance.

CHAPTER XIV.—BRAILLE LITERATURE, TALKING BOOKS AND LIBRARY SERVICE

1. **Early history.**—The history of types for the blind is well set forth in the League of Nations Report, 1929, which gives Dr. Best's book, "The Blind", as the source of its information.

2. "Embossed print is essential to any work of an intellectual nature for the blind. The first recorded attempt to work out a system of enabling the blind to read was made, about 1517, by Francisco Lucas, of Saragossa, Spain, who contrived a set of letters carved in thin tablets of wood. This was brought to Italy about 1575, and improved by Rampansetto, of Rome, who used larger blocks, but incut instead of raised. Both systems failed because of the difficulty of reading them. In 1651, George Harsdorffer, of Nuremberg, revived the classical method of a wax-covered tablet in which letters could be cut by a stylus. About 1676, Padre Terzi devised a kind of cipher code based on a system of dots enclosed in square, or other, figures and also an arrangement of knots tied in strings. Jacques Bernouilli is said to have used this system, as well as incised tablets, in teaching a blind child to read at Geneva in 1711.

3. "In 1640, Pierre Moreau, a notary of Paris, had brought out a system of movable raised letters in lead, and about the same time Scholberger, of Konigsbg, used letters made of tin, and a century later, Le Notre du Puisieux, who lived near Paris, cast metal letters. These systems suffered from two main defects the letters were rough to the touch and they were hard to make out.

4. "Other devices were employed. For example, Maria Theresa von Paradis, who did so much to encourage Haüy, was instructed by the aid of pins stuck in cushions. In his "Lettre sur les Aveugles", Diderot tells of a blind woman, Mlle de Salignac, born in 1741, who had been taught to read from letters cut out of paper.

5. "When Valentin Haüy founded his school in Paris in 1784, his pupil Lesueur found by accident that he could feel the outlines of an "O" which had been strongly impressed on a sheet of paper. Haüy at once set about embossing books and experimented with certain types. Embossed literature had been invented, but the old difficulty of a script which could be easily read by touch remained. It was the evolution of this script by Louis Braille in 1829 which completed the system under which the blind read to-day.

6. "It was not, however, until some fifty years later that the Braille system was universally adopted, and in the meantime numerous other forms of embossed type were devised, both on the continent of Europe, in Great Britain and in America. Perhaps the chief of these were the systems of James Gall, of Edinburgh, whose works were the first to appear in relief type in the English Language; of John Alston, of Glasgow; and of Dr. Moon, of Brighton. Dr. Moon's type is still employed to some extent."

7. **The Braille system.**—The following notes have been kindly furnished by the National Institute for the Blind, London, which is to-day one of the largest producers of Braille literature in the world.

8. "The Braille system for the blind is founded upon six embossed dots ..

The origin of the system dates from the year 1819, when Captain Charles Barbier, a French artillery officer, invented an arrangement of cells containing two vertical rows of six points each, certain combinations of which could, on phonetic principles, be made to represent the letters of the alphabet. His invention was far from perfect, the complicated structure of the characters or signs making it difficult to determine the exact meaning of each letter and large blanks caused a considerable waste of space, while the length of the column caused the finger to have to move zigzag over the paper, instead of in a horizontal line, thus defeating any possibility of quick reading. For these reasons, the scheme did not prove a workable one, but it held the rudiments of a correct system, and needed only to be modified to be rendered available for general use.

9. "This modification was undertaken by Louis Braille, blind instructor in the School for the Blind in Paris, who was able shortly afterwards to put forth a much better system. He halved the number of vertical dots, leaving only three to a column (so that the finger-tip could cover all the six dots), and substituted for the phonetic arrangement an orthographic structure.

10. "In all, sixty-three signs were derivable from the six points. Louis Braille performed his task in 1829 and worked on its adaptation until 1834. At first, the system did not prove popular and it was opposed as arbitrary and impossible, but the professors and pupils at the Paris School, where it was tested, realised its immense superiority over Roman letters for the blind. Louis Braille was allowed to teach it unofficially and out of school hours only, and not until 1854, two years after the death of its author, did Braille become officially adopted at the Paris school. An added advantage of Braille was that it could be written as well as read and could be adapted to musical notation and mathematics.

11. "It would be impossible to imagine the chaos which existed in the education of the blind in England before 1868. The usual plan, up to that date, was for someone who was in comparative ignorance of what had been done by others to start a new system, which was taken up by philanthropists, who had still less knowledge of the subject. Subscriptions were raised, and the already numerous types were increased by a fresh one. In this way, the major portion of the Bible was printed in English in five different systems, while the only other standardised work was in a type introduced by Dr. Howe, of Boston, U. S. A., but it was so small that only one blind adult in fifty could read it. Conferences were held from time to time to discuss the important question, but without satisfactory results, and eventually

the more intelligent of the blind realised that the matter could be more satisfactorily decided by the blind themselves.

12. "In 1868, Dr. T. R. Armitage himself blind, introduced Braille into England. A few years later, the present Braille system was generally adopted. Between 1877 and 1885, the Bible was published by the British and Foreign Blind Association in Braille in thirty-nine volumes. It required 20,000,000 blows by hand of hammer and punch on brass plates and was the work of one blind man, John Ford. The plates were in use for more than twenty years, until the work was reproduced in Revised Braille, Grade II. Stereotyping machines were invented in order that the production of Braille could be considerably increased. For these machines, metal plates were prepared, from which many hundreds of copies could be printed and the plates stored for future use.

13. "In 1905, the whole British Braille system was revised, many contractions (single signs representing more than one letter) and abbreviations (abbreviated words) being added to suit the English language and further reduce the bulk. This system was called Revised Braille, Grade II.

14. "Braille steadily increased in popularity and the alphabet may now be considered universal. It is used practically throughout Europe and America, and has been adapted as closely as possible to Oriental languages. Even in China—where writing is ideographic—Braille is in use, and it has also been adapted to the new phonetic alphabet in that country.

15. **Standard English Braille.**—"In America, various different arrangements of Braille dots were used, but in 1905 the question of uniformity was raised and a Uniform Type Committee was set up by the American Association of Workers for the Blind to decide which of the existing systems should be adopted as a Uniform Type."

16. Discussions and experiments on the virtues of the various systems continued for many years; but it was not until 1932 that a standard English Braille was finally agreed upon between the two major divisions of the English-speaking world. An international Braille musical notation had been accepted two years earlier. This achievement in the rational use of Braille for the benefit of all English speaking blind is the final triumph of this long history. It puts at the command of every Braille reader, over this vast language area, every book, every magazine and every pamphlet in a uniform type, as well as making it possible for them to correspond freely with each other unembarrassed by type differences. To us in India the moral of this tardy evolution, with its bitter controversies and delaying effect upon the advancement of the blind, is that we here should apply all our energies in a spirit of compromise to designing and accepting a Uniform Code. Academic education in India can take a big step forward only when an All-India Code and an ample supply of Braille works in the various languages come into existence.

17. **History of Braille in India.**—We are indebted principally to the British and Foreign Bible Society for the adaptation of Braille to Non-European languages. Working in close touch with missionary societies and other people in the East, the codes were prepared by those who had a thorough knowledge of the various tongues. In India the following are the major codes designed over the past fifty years :—

- (a) "Urdu Braille" commonly called "Shirreff" Braille.
- (b) "Indian Braille" known as Dr. Nilkanthrai's system.
- (c) "Oriental Braille" by Knowles and Garthwaite, commonly known as Marathi Braille in Bombay.
- (d) "Sindhi Braille" by P. M. Advani of Karachi.
- (e) "Shah Braille" by the late Lal Behari Shah, founder of the Calcutta School for the Blind.
- (f) "Tamil Braille Alphabet" by Miss Asquith, founder of the Palamcottah School for the Blind, usually known as Palamcottah Braille.

18. **The movement for uniformity.**—In presenting their "Oriental Braille" in 1902, the Rev. J. Knowles and Mr. L. Garthwaite said, "It would have been possible to consider each language on its own merits, and to devise a scheme of adaptation of the Braille system to meet each individual case. This method presents some advantages but they are more than counterbalanced by the multiplication of

the labour involved. The committee have preferred to entertain the idea of a uniform system, applicable with only slight adjustments to all Oriental Languages". Nevertheless, uniformity was not achieved; and in its pamphlet "Blindness in India", 1939, the National Institute for the Blind, London, gave the following picture :—

19. "The question of the education of the blind is intimately bound up with that of Braille, and here those concerned with the improvement of conditions are confronted with considerable difficulty. The 'battle of the types', which raged in Britain during the first half of the nineteenth century, and was finally won by those who sponsored Braille, was the first step in the educational emancipation of the English blind, who, so long as a multiplicity of embossed types existed, could never hope to have an adequate supply of books, either for use in schools or for general reading. In India to-day there is a multiplicity of Braille codes, which makes it impossible for anything like an adequate supply of Braille literature to be attempted, and renders the idea of an up-to-date printing press for India an as-yet unrealisable dream. It is maintained by some educationists in India that even if no single code can be devised which would be applicable to the many languages and dialects of India, there might be two codes, one for the languages which are Aryan in origin, and the other for the four mainly Dravidian languages of the south. It is a problem which can only be solved by those who know India from within, and when its solution is found the education of the blind will be in a position to make a notable advance."

20. Blind educationists in India had not been idle. The movement for unification began with the publication of the Oriental Braille Code in 1902. In 1923, Canon W. G. Speight organised an All-India Conference of workers for the blind in Bombay, chiefly for the discussion of this all-important subject.

21. When the question of the education of defectives was considered by the late Central Advisory Board of Education in January, 1922, the following recommendations were made :—

(a) That a committee should immediately be appointed by the Central Government to go into the subject of the possibility of a Uniform Braille for all Indian or all Indo-Aryan languages and frame such a uniform system.

(b) That at least one up-to-date embossing plant should be established somewhere in India to emboss literature for the blind; also a depot and workshop, where apparatus for the education of the blind could be produced and made available.

The Government of India, while in full sympathy, was unable to accept these recommendations "on account of the financial stringency prevailing at that time".

22. In 1932, the National Institute for the Blind, London, raised the question of setting up a Braille Printing Press in India and referred to the difficulties created by the variety of Braille Codes. So that there might be some authoritative body to deal with such questions, the Institute suggested the formation of an Advisory Committee on the lines of the Advisory Committee on the Welfare of the Blind in England, but as the majority of the Provincial Governments, to whom this matter was referred, were not in favour, this proposal was dropped.

23. The National Institute again raised the question in 1936 suggesting that if some of the teachers of the principal blind schools could meet and confer, it might be possible for a measure of agreement to be reached.

24. In 1934, the Government of Bombay proposed that Dr. Nilkanthrai's Indian Braille should be adopted by all schools for the blind in India. This proposal was forwarded to Provincial Governments for information.

25. At the 1935, 1936 and 1938 meetings of a resuscitated Central Advisory Board of Education, the subject was raised in varying forms, but no headway was made. In reference to the educational provisions for defective children, it was pointed out, on the strength of the reports received from the Provincial Governments, that the general attitude of the Provinces was that whatever funds became available should be spent in extending education among normal children, and that these should have the prior claim.

26. When, however, in January, 1941, the question came before the Board once more, the Educational Commissioner, Mr. John Sargent, was asked to appoint a

small committee to prepare a report. In consultation with the Provincial Governments, he set up a committee which met in Delhi in November, 1941. It made the following recommendations on the subject of Uniform Braille Code, printing and library service :—

I. That in order to promote the development of the education of the blind in a systematic and co-ordinated manner, it is essential to adopt a Uniform Braille Code for Indian languages as a whole, each Braille sign representing as far as possible the same sound in all Indian languages.

II. That the Uniform Code proposed should be based on the following fundamental principles :—

(i) As far as practicable the blind should not be segregated from the sighted in the process of their education.

(ii) The original arrangement of the Braille signs in seven lines as in the standard English Braille should be maintained in the Code to be framed for Indian languages.

(iii) In the arrangement of alphabets in the code, the phonetic order of grouping in the Indian languages should, as far as practicable, be retained.

(iv) Phonetic relations between the letters of the alphabets should be represented, as far as possible, within the decision already reached, by some simple relation between the signs assigned to them.

(v) Two-cell arrangements should, as far as possible, be avoided and sounds from the different languages be accommodated by assigning the same signs to different, but related, sounds.

III. That none of the current codes can reasonably be accepted as satisfying the needs of a common code for all languages of India.

IV. That the question of incorporating contractions and abbreviations can only be taken up after the All-India Code has been formulated.

V. That the Central Advisory Board of Education should set up a small expert committee, including linguists, who shall :—

(i) Work out a Uniform Braille Code in accordance with the principles recommended in this report ;

(ii) Serve as a Central Board of Reference to whom any specific issue that may arise during the transitional period may be submitted ;

(iii) Form the members of an advisory body to the Central Advisory Board of Education on the education of the blind.

VI. To ensure adequate production of suitable literature for the blind, a Central Press with an up-to-date embossing plant and a workshop for manufacturing necessary educational apparatus should be established ; and a Central library, to serve all the institutions in India, should also be founded.

VII. That in order to enable the schools for the blind to adopt the new code and replace their existing stock of literature printed on old lines, the Central and the Provincial Governments should provide such financial assistance as the circumstances may demand.

27. Approval of a new uniform Braille code for India.—The expert committee, referred to in recommendation V, was set up, and duly submitted the code it designed. The Central Advisory Board of Education referred the code to the Provinces and States for their comment ; and at the final meeting of our Joint Committee on Blindness, Dr. D. M. Sen submitted their replies, excepting those from Madras and the Central Provinces which had not been received. The replies expressed approval of the Code, except for minor modifications of a technical character which were under consideration by the expert committee. In view of the generally favourable reception of the new code by the Provinces and States, this committee recommends its early adoption as the Uniform Braille Code for India.

28. Braille Printing and Publication.—There are two chief sources of production of Braille volumes. Supplies of standard books, novels, text books, magazines, music and pamphlets are turned out in substantial quantities, by power-machine processes, in well-run printing houses in Britain and America.—These employ a number of blind workers on transcribing, proof reading and binding. With minor

exceptions, all the needs of the English-speaking blind throughout the Empire, as well as a number of works in many of the Empire's varied languages, are excellently and cheaply printed by the National Institute for the Blind, in London. A committee, representative of blind readers, selects what works shall be published in Braille; it sees that books which the blind want to read are printed. Before the blind had sufficient say in this matter, there was a tendency to publish over many educational, classical and religious works, and to neglect much of what they really wished to read of modern and amusing literature.

29. Voluntary Braille transcribers.—The other source is the writing by hand of Braille books by organised bodies of voluntary workers. Usually only one copy is done at a time, though sometimes two. This service is reserved chiefly for books on special subjects for which the demand is restricted. Any blind student in Britain, for example, or any blind person with a special study or hobby of his own, has the privilege of asking for some work to be brailled by hand. When completed, the book is lent to the blind reader for as long as he needs it, after which it passes to the Students' Library of the National Institute for the Blind, or to the National Library for the Blind, to be at the disposal of readers at large. A man may need a book on boat-building or on keeping Angora rabbits; a woman may be a student of Chinese philosophy; while a lecturer in history may wish to have a recent publication on the Ottoman Empire. Thus special libraries have been built up.

30. This voluntary transcription is not a cheap service. Braille writing machines, paper, binding, distribution, the training of voluntary workers and office administration all take money, making the cost much higher than for machine-printed books. Unless the system is well organised, and high standards of Braille writing maintained, there can be much wasted effort and useless overlapping. Any efforts in this direction in India, and they will be well worth while, should be controlled by a Central Braille Publications Committee, assisted by a subsidiary committee for each language area. The production of Braille is so costly, and the need for books so great, that the closest co-operation between all workers in this field should be maintained.

31. Libraries for the blind.—These are usually run in one of three ways :—

(a) As a department of a society for the blind which also gives other branches of service.

(b) As the sole service run by a society for the blind.

(c) As a department of a public library for all the citizens, sighted or blind, of a town or county, provided by state, municipality or philanthropic foundation, such as the Carnegie Corporation.

32. Library service to the blind is always free, and there is also usually no charge for transport costs on Braille books and talking-book records between library and reader. In many countries the Post Office makes no charge, or else the fee is so small that the library itself meets it. In countries where a substantial proportion of the blind are keen readers of Braille or talking-books, the central library for the blind usually has a number of subsidiary distributing points, either at district schools, workshops or clubs for the blind, or at local public libraries. These subsidiary libraries are sent a hundred or two hundred volumes of selected books, according to the need, and these are changed every six months or at lesser periods by the central library. For instance, the New Zealand Institute for the Blind maintains the central library, and supplies three public libraries in other parts of the Dominion with books which are changed regularly by the Institute. The municipalities controlling these three public libraries pay the Institute for this service, it being recognised that the blind have the same right as sighted people to any free library service the city may offer to its citizens at the ratepayer's expense.

33. Subsidising of Braille Printing.—Braille literature is necessarily bulky, and expensive to produce and to transport. Most blind people are poor or their means limited, so that, in order to bring literature within their reach, private philanthropy, governments and local authorities contribute generously to the cost. The Government of India accepts publications and talking-book records at the reduced rates of half an anna for the first 100 tolas, and half an anna for every additional hundred tolas up to seven hundred tolas. Braille printing houses are usually liberally

subsidised by governments. For example, the National Institute for the Blind, London, which prints the bulk requirements of Britain, the Dominions and the Crown Colonies, receives a subsidy of Rs. 1-14 per volume and two annas per magazine; these payments from Government and Local Authorities in 1938-39 totalling £10,101. In America, in 1929, the Library of Congress contributed a subsidy of \$70,000 to the American Printing House for the Blind, and in subsequent years made large grants under the Works Projects Administration for the printing of Braille, as well as for the manufacture of talking-book machines and records, as part of the Federal plan for the relief of unemployment.

34. Need for Braille Printing house in India.—The English-speaking Dominions and Colonies are well served by the National Institute for the Blind, while they are also able to draw on American sources for a wide range of books and magazines. The National Institute, too, supplies India with most of its needs in English Braille and has also printed the Bible in a number of Indian languages for the British and Foreign Bible Society.

35. But only in India, in Indian languages, can the full Braille requirements of this country be met; and little further progress in the general education of the blind can be achieved until an ample range of books in Indian languages is available. An effective Braille printing house is one of the foundations upon which future progress must rest. We heartily support the two recommendations of the Indian Uniform Braille Code Committee, 1941.

“VI. To ensure adequate production of suitable literature for the blind, a Central Press with an up-to-date embossing plant and a workshop for manufacturing necessary educational apparatus should be established; and a Central Library to serve all the institutions should also be founded.

“VII. That in order to enable the schools for the blind to adopt the new code and replace their existing stock of literature printed on old lines, the Central and Provincial Governments should provide such financial assistance as the circumstances may demand.”

36. Recommendation by Central Advisory Board of Education.—We note with keen satisfaction that the Central Advisory Board of Education, in its report in January, 1943, recommends the setting up by the Central Government of “a Central Press with an up-to-date embossing plant and a workshop for manufacturing necessary educational apparatus together with a Central Library to serve all institutions in India”.

37. Paucity of Present Supplies.—In Appendix H we give a table of schools, language of their areas, number of active Braille readers qualifying annually, the number of Braille books available and Braille code used. The number of active readers given must be accepted with reserve. Unless they have learned English, the literature available to them in Indian languages is in reality nil. Thus it is difficult and discouraging for a reader to retain his efficiency or his interest. Almost all the existing books in the possession of the schools are old and badly worn. Those in Indian languages have been copied singly by hand. Taking languages and codes together, we find that these works, few as they are, represent from twelve to fourteen reading groups. The whole present scope is so limited, both as to the number of readers and of available books, that we feel no really large-scale sacrifice will be involved by any of the groups in surrendering its vested interests to the achievement of a uniform type and substantial libraries.

38. The talking-book.—The talking-book is simply an adaptation of the gramophone to bring literature more readily within reach of the blind. Braille has its limitations. Blind children, who use Braille as their medium of education become amazingly proficient at it, and some people, who lose sight between leaving school and the age of thirty, become good or moderate readers; but there are many, even in this age group, and almost all those beyond it, whose touch is not sensitive enough to allow them to be more than slow and halting. One of the early bold types, the Moon type, has been retained in Britain and America for the older people's use, but it, too, has its limitations. When, therefore, in 1934, complete literary works were recorded on gramophone records specially for blind people, they were warmly welcomed.

39. The machines and records are so designed that each side of an English record plays for almost twenty minutes, and an American, fifteen. In England the production is in the hands of St. Dunstan's and the National Institute for the Blind; and Lord Nuffield generously contributed £40,000 to start the new system. In America, the free distribution of a vast number of machines and the recording of books has been done by the American Foundation for the Blind and the American Printing House for the Blind, the cost being met by Government as a contribution towards the relief of unemployment as well as a service to the blind. In America, monthly magazines are now published in this form. The system is well established in Britain, Canada, New Zealand and the United States.

40. The machines are issued free, or at very low cost, to the blind readers. The records are circulated without charge from libraries for the blind, and free or cheap postage has been granted. The rapid growth of this new form of reading may be gauged from the fact that in 1942 Braille and Moon readers in the United States numbered 12,898, and talking-book readers, 15,012. Volumes of embossed books circulated to the former numbered 407,012, and containers of records to the latter numbered 456,734.

41. The talking-book will not replace Braille. It is complementary to it. Braille is essential for educational work, for books of reference, for music, for much ordinary reading by the skilled Braille reader, for letter-writing between blind people, for notes and records of business transactions blind people wish to keep, for playing cards and for various other purposes. The talking-book's achievement is to bring wide reading easily within reach of vastly increased numbers of blind people. The rational and adequate production of Braille should be the first step in India, and should be thoroughly established before talking-book production is thought of.

CHAPTER XV.—GENERAL POINTS

1. **Guide Dogs.**—A dog is as good a friend to a blind man as he is to a sighted one; and from time to time blind people with a gift for animal training have taught dogs to be their guides. In the last twenty-five years organisations have sprung up, chiefly in the United States and Germany, for the special purpose of training and supplying guide dogs to the blind. To ordinary people this service makes a deep appeal; it seems simple and beautiful—giving a blind man his freedom through the cleverness and devotion of man's canine friend. But there are snags; and for one cause or another no more than a tenth of the blind can or wish to make use of dogs.

2. A number of the blind are so good at getting about alone that they do not want this help; half the blind community has enough sight to avoid obstacles and to find its own way; another group lacks the proper understanding of dogs and cannot control them; quite a section of blind people in western countries dislike anything which brands them as blind, and makes their blindness obtrude upon the public; and others cannot afford the cost of feeding a large dog.

3. Cost would be a great handicap in India; and, as things are today, it would probably be cheaper for a man to employ a boy to take him to places he cannot find himself. The cost of training, too, is high. A large establishment and a skilled staff are required; and many dogs, before their training is finished, have to be discarded as useless. In the United States the cost of turning out a successful dog is Rs. 3,000.

4. When a dog is successful, he is extremely so; and it is inspiring to watch one at work in a busy city, weaving through the traffic with his confident master walking briskly beside him. Unless a blind man has work to keep the dog in constant employment, its efficiency will fall. Our conclusion is that the guide dog service is one of the frills of blind welfare and that, for the time being at any rate, there are more urgent needs and better ways of spending the monies likely to be available for some time to come.

5. **Voluntary Workers.**—For blind welfare services to be fully successful, it is essential that the public should give generously of voluntary service. In the west it has been forthcoming in splendid measure—in fact, the sympathetic impulse to help blind people in a practical way has been the driving force behind its growth. Governments and municipalities can make grants; the public can give liberally

from its purse ; but there is still much service—which cannot be paid for—the human touch, the kindly act, the helping hand where it is needed. Many people of limited income can afford little or nothing in cash, but devote much of their leisure in giving free service to their blind brothers and sisters.

6. They help in such ways as reading newspapers, magazines and books for general interest and entertainment ; reading to students of special subjects, preparing for examinations ; transcribing single copies of Braille books by hand ; acting as guides ; organising sales of the goods made by the blind ; visiting blind people in their homes to teach them Braille, typewriting and handwork ; planning entertainments and outings and visiting blind people in hospitals to read aloud and write letters. The blind are cheerful and appreciative, and volunteers find their efforts well rewarded not only by gratitude, but by seeing most satisfactory results. Voluntary workers, too, spread useful information about their societies' activities.

7. The relationship of a Blind Welfare Society towards its Blind Community—
The older type of "institution" for the blind regarded itself under obligation to render service only to such "inmates" as entered its doors. From that we have advanced towards the broad provincial society for the blind, which holds itself responsible for general and particular services to every *bona fide* member of its area. All registered blind people, by the fact of their blindness, automatically acquire membership, as it were, of their particular provincial society. Its roll, therefore, is not merely the number of blind people who, at any given moment, are under instruction or in employment in the actual schools, hostels and workshops belonging to it, but every member of the local blind community.

8. **"Atmosphere of the poor-house" should be avoided.**—The time was when well-to-do families felt it was undignified for a sightless member of the family to associate with a society for the blind, which they believed dealt only on a charitable basis with the blind of the lower orders. The names of some of these old societies, such for example as "Institution for the Indigent Blind", did indeed suggest this. Nowadays a society is designed to serve blind people of all classes. Its aim is to see that all have the aid they need to get the best out of life. It would be well in the Indian field to avoid the dank fog of charity and poor relief, which clung coldly about blind welfare in the west in its earlier days. An excellent change has come in the dropping of the old terms—"inmates", "institution", "affliction", "pity", "indigency" and so on. We do not speak in this way of the facilities for education and employment in the ordinary community ; and there is no reason whatever why we should apply them to those who cannot see.

9. **Need for blind welfare work to be separated from other forms of service.**—The practice of combining the education and employment of the blind with such activities as the education of deaf-mutes, homes for poor, aged and helpless and so on, is to be discouraged.

10. Such combinations have almost invariably proved unsatisfactory. The blind and deaf-mutes have little in common and rarely agree. Moreover, the blind form such an extensive group in India that it is best that a society should confine itself to doing the widest possible job it can for them, rather than spread its services over two or more groups. The major body with whom the blind should be brought into close association is that of the normal seeing public.

CHAPTER XVI.—A PROPOSED INDIAN COUNCIL ON BLINDNESS

1. **A many-sided task.**—It will be gathered from what we have said that dealing with all sides of blindness is no simple task. We find ourselves responsible for a community of at least two million souls of all ages and from all walks of life, though for the most part very, very poor. Misfortune has robbed them of the joys of existence and has made them a burden to themselves and to society. To reduce their number and to give those who remain entry into the everyday world of work and play, we are faced with a complexity of undertakings which will ultimately involve all branches of education and many of medicine, industry and commerce, housing schemes and hostels, book production, the initiation of legislation, home social service, big financial undertakings and close liaison with workers in other social

spheres. That our task should be effectively discharged in this great country demands a well-founded administration—an All-India body to lead, advise and co-ordinate.

2. National organisations of other countries.—National bodies have come into being in other countries as a logical evolution. At first there were the small scattered societies, each going its own way, uneconomic units in themselves, rivals for the public's gifts and failing to achieve much improvement in the betterment of the mass of the blind. In the end wisdom has triumphed. Britain, Canada, South Africa, New Zealand, the United States, Russia and other countries have built up national bodies; and with their creation the work, so well begun by isolated voluntary effort, has finally given the blind their place in society.

3. Movement towards a National Body in India.—In India today, fifty seven years after the founding of the first school, we are badly in need of a central body. There have, indeed, been stirrings among workers for the blind for some years, as will be seen from the answers the existing societies have given to the question, "Is your society willing and able to enter into a close association with a properly accredited National Society for the Blind in India?" The answers indicate a general readiness to merge or co-operate.

Calcutta Blind School	"Personally I shall welcome it."
Lighthouse, Calcutta	"Ours is the only institution which was established with an All-India outlook and with a programme to serve, as a central clearing house, the needs and interests of the blind in India as a whole. Our suggestion is that it should be taken as the nucleus and be developed to form the proposed National Society for the Blind."
Kalimpong	"We could join an accredited National Society. But if such a society could take over the school and institution it would be much better."
All-India Association, Calcutta	"Yes. This Association is the only one of its kind at present in India, and the Working Committee has decided that if the National Society for the Blind is founded, the Association should be amalgamated with it and fully support the expansion of the work."
Ranchi	"I should not think my committee and chairman would have any objection to our being in close touch."
Patna	"I do not think there will be any objection."
Allahabad	"Yes, I think so."
Lucknow	"Of course, yes."
Rajpur	"Our society would co-operate with any work for the blind which did not interfere with our missionary aspect, which is our primary object."
Amritsar Boys	"Our institute would gladly co-operate."
Lahore	"Yes, with the permission of our Department."
Karachi	"Our society will be very willing to enter into close association. I believe this is absolutely necessary for the progress of the education of the blind."
Bhavnagar	"Yes. Subject to the approval of the Bhavnagar Durbar under whose patronage and by whose favour we exist."
Dadar School, Bombay	"We have been trying for the last four years to have blind welfare work co-ordinated, and if a properly accredited National Society, like the National Institute, London, or the American Foundation, New York, were established, I feel that our management will be willing to enter into close association."
Happy Home, Bombay	"Our Committee will be very happy and willing to enter into close association."
Industrial Home, Bombay	"We will do anything to promote the well-being of the blind people of India."
Victoria Memorial School, Bombay	"Owing to constitutional difficulties, it is not possible to answer this question at present."
Blind Women's Home, Bombay	"Yes, with pleasure."
Poona	"Our institution will be willing to seek and receive advice from the National Society, and will be glad to co-operate."
Nagpur	"Yes, with great pleasure."
Poonamallee	"Yes."
Palamcottah	"Any proposals of this nature would receive most sympathetic consideration."
Lutheran Mission, Renta-chintala	"Yes."
Mysore	"Yes."

Cochin "I welcome this. I tried to bring into existence a central Indian organisation but on account of the war this had to be postponed."

Sir Henry Holland, speaking after his lifelong experience in Northern India says, "The suggestion of a Central Headquarters with the following departments is excellent—model practical school, model practical workshop for manual trades, a course in association with them for teachers, instructors and workshop managers, Braille printing presses and central library."

4. Role of the National Body.—The great work of a national body is to marshal all the resources of service, money and good-will offered for the betterment of the blind, and to expend them in the way which will give the greatest good to the greatest number. In other countries, by virtue of their wide functions, as well as by the quality of their service, these national societies have become semi-official bodies, acting as the trusted agents of both the state and the public. They are the expert organisers to which the major task of blind welfare is delegated.

5. Blind Welfare Unsuitable as Sole State Service.—It is sometimes argued that blind welfare should be an entirely State service. With this we can only partly agree. All pioneering in this field has come from voluntary effort; and it has been carried through the major stages of its progress by the unselfish toil and generosity of the friends of the blind, working in close harmony with the enterprising blind leaders of the blind. Only after many years has the State entered the field and then, wisely enough, not to displace those doing good work, but to strengthen them, to accept their advice, and to give them the wider measure of support State money and State service can render.

6. Voluntaryism Essential.—If, in fact, blind welfare is made solely a State service, the blind are particularly heavy losers. For their success as workers, as well as for their sharing fully in society, they are dependent, not only on the good will of the State, but also on their direct personal relationships with everyone about them and on a thousand and one kindly actions. It is a weak trait of society that once government assumes sole responsibility for a particular service, society says to itself, "That service is no longer a concern of mine—it is the Government's job." State departments, too, are inelastic, and are of necessity controlled by innumerable hard and fast rules. Service to the blind is essentially personal and human; and whenever attempts have been made to fit it into set departmental form, it has suffered loss of efficiency. The National Institute, London, gives this example, "When workshops for the blind have been taken over by municipalities their operations have often become less and less economic. Running costs have increased, economic wages have declined; increased augmentation and grants of various kinds have tended to become the main factor of the total remuneration; trading losses have increased."

7. Speaking too, of services to the blind directly controlled by public bodies, the National Institute says, "As managers of workshops for the blind, popularly elected bodies have great difficulties to contend with. They are open to political influence, particularly when public opinion can be organised by 'pressure groups' of blind persons. Even apart from that, there is a temptation to earn kudos by ostentatious kindness. . . . In the matter of training for manual occupations there is also some ground for criticism. The total of unemployable blind persons, 63,119, exceeds the total of blind persons over the age of 50. There are in fact among them a considerable number of comparatively young people. Some of the younger blind have other defects, mental or physical, which make them beyond doubt unemployable; but there is a temptation for public bodies to take the easiest way out of the difficulty presented by the loss of sight, and to have regard only to the prevention of destitution. They pay the cash and let the training go."

8. To voluntary societies, too, is due the continuous branching out into new fields. The talking-book service, the placement of blind workers in ordinary factories, organised vending stands, homes for blind babies, the provision of wireless sets for the blind and the training and after-care of the war-blinded are examples of recent developments, all initiated by voluntary effort. Under government control, new work cannot be undertaken until a distant treasury official has given his tardy

consent ; but, as no guarantee can be made that some new line will be successful that consent is often withheld. This is the natural conservatism and caution of State administration ; and so a service such as blind welfare must have scope for freedom if it is to retain its vitality.

9. The State's Part.—Nevertheless, the State's part in blind welfare service in modern countries is a very substantial one ; and the trend is for it to carry much the greater share of the cost. (See distribution of expenditure in England, Chapter XVIII, para. 2). The State and public authorities are steadily instituting more and more services direct to the blind ; though, on the other hand, they find great advantage in delegating many phases to philanthropic, non-profit-making bodies, which are better equipped than the State to deal with the innumerable and widely varying human problems entailed in these branches. Certain other phases can fit readily enough into the pattern of direct Government service. They include such clear-cut tasks as the education of blind children, the running of ophthalmological services, the payment of pensions to the blind and the printing and publication of Braille works.

10. The branches which present too many personal considerations to answer well to direct public service include, for example, the establishment of qualified young blind people in independent occupations, as described in Chapter XIII, para. 27. The necessarily strict rules governing the expenditure of public funds will not readily allow the spending of, say, Rs. 2,000 on setting up a man as a lawyer, Rs. 1,000 on starting a musician on his career, or Rs. 500 in establishing a basket-maker in a bazar. There is little or no security, beyond the individual's character and ability, on which to make such advances, interest is seldom collectable, and most of these loans have eventually to be written off. Such necessary expenditures, however, are more than justifiable as part of the general cost of establishing the blind as capable workers in the community. Under administration by public authority there is trouble if each individual is not accorded equal financial treatment, whether he merits it or not. Under the voluntary organisation men of outstanding qualifications can be selected for special treatment without political agitation arising. Actually all avenues of employment of the adult blind are better handled by a voluntary or semi-voluntary organisation, thus ensuring to the blind worker the full benefits of both State support and of philanthropic interest.

11. Government's Responsibility.—The function of the State is that of shouldering the responsibility of ensuring that adequate services to the blind are in force, whether given direct by the State, whether by local authorities, whether by voluntary philanthropic organisations, subsidised or otherwise, or through the everyday activities of private enterprise and trading. (In Appendix I we outline the respective fields we consider best adapted to Government and to voluntary effort).¹

12. In the course of this report we have recorded something of the history of blind welfare in other parts of the world, the courageous pioneering of private philanthropy, the long struggle to secure a status for the blind and the gradual recognition by the State of its responsibilities. We have noted too the valuable part voluntary effort continues to play, none the less valuable because of the large share the State is now assuming. We feel that in India we should skip as much as we can of the evolutionary period, the years of trial and error, through which other lands have passed, and go straight to a scheme into which all modern services can eventually be fitted, whether conducted by State, public authority or by voluntary or private effort. Alone, the voluntary system is often not rich enough or powerful enough to meet a need ; alone, State action may not be adaptable enough. Working in close co-operation, they can achieve much.

13. English Advisory Committee on the Welfare of the Blind.—In England there has evolved an Advisory Committee on the Welfare of the Blind, which plays much the same role as the Indian Council is expected to play. It was set up to advise the Minister of Health on all matters relating to blind welfare, and thus has official status. It consists of Chairman and Vice-Chairman, four nominees of the County Councils Association and four of the Association of Municipal Corporations, and one

nominee of each of the following : National Association of Blind Workers, London County Council, and National League of the Blind, together with ten persons nominated by the Minister of Health, and selected as having special experience of voluntary work among the blind.

14. In 1931 the National Institute for the Blind, London, through its Committee on Blindness in India, made representations to the Secretary of State recommending the setting up of a somewhat parallel body in India. (*Vide* Chapter I, para. 6). Writing to us on October 8th, 1943, the National Institute says, "In suggesting an Advisory Committee for India, it was realised that this Constitution would not be applicable as it stands, but it was thought that some kind of Advisory Committee, with a number of persons upon it who had direct concern in the education and training and general welfare of the blind in India would be valuable, and could make recommendations to the Central Government. A Committee to be effective should represent knowledge of, and interest in, the blind on the one hand, and executive authority on the other."

15. As the National Institute for the Blind remarks, this model is not wholly applicable to India—few of the organisations, represented on the English body, have their counterpart here ; England is a small compact country, India a complex sub-continent ; the English body is concerned only with the welfare side of blindness, while in India prevention and treatment of eye diseases will hold a specially important place for many years. The situation differs, too, in that in England, the Advisory Committee represents philanthropic bodies which had already created a wide system of blind welfare and had had long experience of it, whereas our proposed Indian Council is expected largely to initiate and create. Nevertheless, the English body demonstrates the invaluable partnership between official and unofficial.

16. The Suggested All-India Organisation.—It is these considerations which shape the character of our constitution and membership. As organisations of the blind and of workers for the blind are created, the constitution should be modified under powers which should be conveyed in its rules, to meet changing conditions. We have worked out an organisation which we believe will bring to the blind, and to the prevention of blindness, the full benefits of government action, voluntary effort and private philanthropy, all combined.

17. An Indian Council on Blindness.—We recommend the following framework :—

(a) At the centre a body to be known as the Indian Council on Blindness.

(b) Under the Council there should be two Committees, one dealing with the Prevention and Treatment of, as well as Research into, Blindness and the other dealing with the Welfare of the Blind.

18. The primary consideration in the setting up of this structure is that it should be adequate for the task and that it should be representative of the various Departments of Government, and public and private bodies, upon which the burden of services will fall.

19. The Council should be the major body, representative of all geographical area and other interests and dealing with items of major policy, while the Committees would be charged with the duty of carrying out the specific functions allotted to them. The Council should be as representative as possible while the Committees should be smaller and more of the nature of executive committees.

20. Provincial and State Councils.—This structure at the centre would have its counterparts in the Provinces and principal Indian States with corresponding Councils and Committees, acting in co-ordination with the central body and responsible for services within their Provinces and States.

21. The Major Functions of the Council.—The very special function of the Indian Council on Blindness and its organisation is to act in the several capacities of an advisory council to the Central, Provincial and State Governments, as a clearing house for all matters pertaining to blindness, as the driving force behind effort throughout India, as an executive body, itself administering a number of welfare services, and as the trusted agent of the State, the philanthropic public and the blind people themselves.

22. Administration and Powers.—Its administration should therefore be representative of the Central Government, Provincial and State Councils, the philanthropic public and the blind community. The Council, when appointed, should draw up its rules and should have discretion to appoint vice-patrons. It should be empowered to appoint the two Committees, and also to include in their membership persons who are not members of the Council.

23. Membership of the Council.—The following is the suggested membership:—

<i>Patron</i>	His Excellency the Viceroy.
<i>Chairman</i>	The Hon'ble Member for Education, Health and Lands (<i>ex-officio</i>) or the Minister of Health.
<i>Vice-Chairman</i>	To be elected by the Council Members.
<i>Joint Secretaries</i>	The Adviser in Ophthalmology and the Adviser in Blind Welfare (<i>vide</i> para. 24 <i>infra</i>).
<i>An Hony. Treasurer</i>	

Members—

- A.—The Director General, Indian Medical Service (*ex-officio*).
- B.—The Public Health Commissioner (*ex-officio*).
- C.—The Educational Adviser to the Government of India (*ex-officio*).
- D.—The Secretary to the Government of India in the Education, Health and Lands Department (*ex-officio*).
- E.—The Secretary to the Government of India in the Labour Department (*ex-officio*).
- F.—A representative of the Finance Department.
- G.—A member of the Council of State chosen by that body.
- H.—A member of the Legislative Assembly chosen by that body.
- I.—One representative from each of the Provincial and State Councils on Blindness.
- J.—One member nominated by St. Dunstan's All-India Committee for the War-Blinded.
- K.—Three able blind people nominated by the Patron.
- L.—Six other persons nominated by the Patron, of whom one at least should be a woman.
- M.—Two representatives of Chambers of Commerce.
- N.—Two representatives of labour organisations.
- O.—One representative of the Indian Red Cross Society.
- P.—A representative of the All-India Ophthalmological Society.

24. Advisers in Ophthalmology and Blind Welfare and Secretaries to the Respective Committees.—In para. 23 we have mentioned that the Joint Secretaries to the Indian Council on Blindness should be the Adviser in Ophthalmology and the Adviser in Blind Welfare. These officers would be appointed by the Central Government, but they need not be Government officers before their appointment. The way must be left open to appoint the best men available, whether coming from Government or from voluntary societies inside or outside India. These two officers, it is suggested, should act as secretaries also to the two principal committees, the one to the Committee on Prevention and Treatment of and Research into Blindness, and the other to the Committee on the Welfare of the Blind. We visualise the appointment of the Adviser in Ophthalmology in the office of the Director General, Indian Medical Service, and that of the Adviser in Blind Welfare in the office of the Educational Adviser to the Government of India.

25. Much will depend upon these two men. The vigour of a new social work its quality and the inspiration of leadership throughout a wide pioneering field depends to a very great extent upon the energy, enterprise and ability of the men at the centre; and we hope that great care will be used in making these appointments. Theirs will be the task of conferring with governments and workers in the Provinces and States and of initiating the policy this report recommends.

26. The Council's Headquarters for Blind Welfare Work.—The welfare side of the work calls for a substantial headquarters, preferably not too far from New Delhi. The climate should be a good working one. Nearness to the capital is important, for in work of this kind there are endless matters to discuss and arrange with every department of government, and association becomes continuous. The more, too, that leading men see of the work going on and its fine results, the better departmental support and co-operation will be. The site should be roomy enough to give plenty of space for immediate buildings and for later growth. The Committee strongly recommends Dehra Dun as the most suitable site.

27. Administrative Buildings.—Administrative buildings will be required, which should also have adequate accommodation for lectures and conferences.

28. Braille Printing and Library Service.—The Braille printing and library service should have its section for the printing and publication of Braille works and the necessary storage space.

29. Training of Staff and Outstanding Pupils.—The training of teachers, workshops managers and blind welfare staff, the setting of sound standards and research into occupations and special apparatus, call for the inclusion in the Headquarters of a model school for two hundred children, workshops for two hundred blind workers with accompanying teachers' and managers' training departments, hostels and staff quarters. A musical department is also desirable. There should be a department for higher education which would be taken chiefly in ordinary schools under arrangements made with the boards of neighbouring schools, the pupils using the Headquarters school as their base. Suitable people for training courses would be admitted from throughout India while Provincial and State Councils would be entitled to send outstanding blind pupils in order to give them wider scope and to discover men and women of character to take their part in blind welfare and other community works.

30. Blind to Contribute other Services.—The scope of activities at Headquarters should also provide for the blind taking a considerable part in producing the vegetables, poultry and dairy products required by the Headquarters community, and doing much of the laundry and cleaning work.

31. The Approach to Existing Bodies.—As has been recorded in para. 3 of this chapter, the bulk of the existing schools and societies for the blind have expressed their readiness to join, affiliate with, or co-operate with a wide All-India organisation. It is to be hoped that unity will be achieved, and that these pioneer bodies will merge into the new movement in a way which will bring them great advantages without robbing them of their individuality.

32. The Committee for the Prevention and Treatment of and Research into Blindness.—It is expected, as has been said, that the Adviser in Ophthalmology will be in the office of the Director General, Indian Medical Service, while the work of this Committee should be carried on wherever it is most suitable and in close co-ordination with other research, preventive and treatment work.

33. Sequence of Steps.—The setting up of the Indian Council on Blindness soon after the presentation of this report should present little difficulty; and we strongly recommend that this step should be taken at an early date.

34. The Adviser in Blind Welfare and the Adviser in Ophthalmology should be appointed immediately, so that the earlier stages of the work can be begun at once. A wide field of immediate activity lies open to both these officers.

35. Launching an Appeal.—An important early step, particularly on the blind welfare side, is the initiation of a wide appeal to the philanthropic public to raise substantial funds with which to carry out the services which do not fall within the scope of government activities. This is a step in which the Advisers may play a considerable part, co-ordinating the appeal with the establishment of the Provincial and State Councils on Blindness. They will, of course, need to make use of the services of experts in the fields of appeal and publicity; and we recommend this as a work in which the Department of Information and Broadcasting can render a great public service.

36. Aspects of a Wide Appeal.—Sympathy for the blind has always run deep; and there is probably no group for whose real benefit the public at large will give more generously. Today India has more ready money than ever before; and perhaps, when the war is over, many will be happy to contribute liberally to the cause of blind welfare as a thank offering for having come through a great world war in safety and without hardship. At the end of the war, too, we shall want new activities to which to turn our interest and energies; and what could be better as one of these than the solving of our blind friends' miseries.

37. A big appeal has great value in the fact that it helps to educate the public in the capacities of the blind and in the importance of preventing blindness. Newspapers, radio stations, and the cinemas are generous in the publicity privileges they give to a popular appeal; and all the speech-making, pamphlets and entertainments help further to spread knowledge. It is a fact, too, that once a person gives

a subscription to blind welfare work, he henceforth takes a paternal proprietary interest in blind people and their success ; and they, in turn, will be deeply grateful to him.

38. By the time the appeal is closed, the Council and its associate bodies should be in a position to implement, stage by stage, the objectives we have set out in this report.

CHAPTER XVII.—THE PRACTICAL UNIT AT THE PRESENT STAGE

1. We would advise the Provincial and State Councils on Blindness, in implementing this Report, not to hurry into too much diversity of effort, but rather to concentrate on creating the firm foundation on which ultimately all other branches of blind welfare can be built.

2. This concentration should be upon schools for the young, physically and mentally fit, totally or nearly totally blind, workshops for the employment of qualified trainees, Braille libraries as a basis for widening knowledge and homes for the unemployable blind to relieve them of the need to beg. Each Provincial and State council, when it knows what funds can be counted upon for capital and maintenance purposes, should decide just exactly what number of units it can establish in its area and where they should be located. We would advise the following as the types of units to be established and the field to be covered in the coming period of expansion.

3. If, as we strongly recommend, Departments of Public Instruction will forthwith make the education of blind children a straight-out government service, then the work of the Provincial and State Councils will be greatly eased ; and they will be able to concentrate more intensely on the all-important field of employment for the adult blind.

4. **The School Unit.**—The school should be residential. It should have a site and the buildings be designed, to accommodate ultimately two hundred children. It is best that it should be close to a city, though preferably in the outskirts, where staff can come and go with ease. The grounds should be roomy enough for ample playgrounds and gardening.

5. **Nursery Department.**—It will be well for the school to have a nursery department for the care and early training of pre-school children.

6. **A Simple Syllabus.**—For most of the children, (those taking up handicrafts) the maximum age for their remaining in school should be about sixteen years. If they are enrolled young enough, this should allow ample time to give them an adequate elementary education of a simple type, a sound grounding in the use of their hands at simple trades and a foundation in music. The syllabus should include instruction in personal cleanliness, in normal home household duties, in physical development and games.

7. **Preference to Sound Children.**—At the present stage, care should be taken to admit only mentally and physically sound children—children who, when they come to be adults, can set a high standard in both quality and quantity of production.

8. **Higher Education.**—There should be a class for the more advanced education of children of special ability ; but its membership should be restricted to not more than from five to ten per cent. of the pupils.

9. **Schools not to be Elaborate.**—The whole lay-out should be of the simplest character, both for economy in cost and also so that the children may not be removed too far from their normal social environment.

10. **Workshops Entirely Separate.**—The school should be run purely as a school, and not as part of a workshop for the adult blind.

11. **Workshop Units.**—Associated with each school, for the employment of its trained pupils, there should be a workshop, and probably, in the course of time, several workshops. It is usually uneconomic to have less than one hundred workers in a workshop for the blind, while the maximum could range from two to five hundred, or even more, if commercial marketing conditions made it possible, and

satisfactory living accommodation for the blind workers were to be had in the neighbourhood. Probably it will be found more practicable to have workshops, ranging from one hundred to two hundred workers each distributed amongst the chief centres of population. It is to be noted that, as in ordinary industry, the smaller the workshops, the higher will be the ratio of overhead costs.* In a recent frank review of workshops for the blind in England, the National Institute for the Blind says:—“It is obvious that most of them are too small to be economic units of production for managerial and supervisory expenses are multiplied over and over again. The proportion of sighted help per blind worker is necessarily at its maximum in the smallest shops”.

12. Most existing schools and workshops say that, in order that their activities should be known to the public and so be given financial support, their establishments need to be in centres of population. This is probably more especially the case in regard to workshops. They require to be where blind workers can come by the day from their places of residence, though probably some hostel accommodation will also be wanted.

13. If a workshop is established on the same property as a school, it should be quite separate in regard to places of work, residential quarters and grounds. The transfer of a boy from school to workshop is an indication that school days are over and that serious work has begun.

14. **Training Department in Workshop.**—The workshop should have its own training department to give final training on a commercial basis to the trainees sent on from the school, and which will train from the beginning newly blind young men and women, who lose their sight after the age of sixteen, before drafting them into the ordinary working departments.

15. The workshop may also have a music department for the purpose of keeping the best musicians trained as a band, to take professional engagements under control of the society. A small class in Braille and typewriting, too, may be held for the training of those who have lost their sight after the age of sixteen (provided they have already had a literary training).

16. **The Semi-self-sufficient Unit.**—There is an alternative type of unit, which has been developed to some extent, and which might be found both practical and economic, namely a small, to some extent self-supporting, settlement of blind children and adults, who produce their own vegetables, fruit and eggs, and attend to many domestic matters themselves, washing, mending, cooking and so on. This system is worthy of trial, especially with blind people coming from villages, and the cultivator class.

17. **Library Service.**—The Provincial Councils should have branch Braille libraries, in association with the central library service to be maintained by the Indian Council on Blindness.

18. **Homes for Unemployable Blind.**—If governments, municipalities and the public will contribute the funds, the Councils on Blindness should establish homes for the unemployable blind as outlined in Chapter IX. The homes should be on sites quite separate from both schools and workshops. Close contact between them would not be helpful to the morale of the occupied blind. Probably the homes would be best in the country, so that the temptation to those who were once beggars, to return to the old habits, may not be too great.

19. **Military and Mission Properties.**—It is possible that some of the properties, used during the war for defence purposes, for military hospitals or as prisoners-of-war camps, may be available for conversion to blind welfare purposes. With changing circumstances and policy, there are probably mission buildings and land which could also be taken over on reasonable terms.

20. **Government support of Existing Schools.**—While this Committee recommends that the education of blind children should become part and parcel of the State education system, it should also be open to governments to assist the present schools for the blind or schools which may hereafter be founded, by subsidies or grants, provided always that the government is satisfied with the quality of the work done in them. In doing so, governments would be applying in the field of blind education the system of grants-in-aid followed in the education of sighted children.

21. Capital Costs.—The capital costs of a school or a workshop for two hundred pupils or workers, including land, hostels, class and work rooms, equipment and staff quarters, would probably not be less than Rs. 3,00,000, the cost varying from province to province. A home for two hundred unemployable blind should cost about half that figure. The cost of the Indian Council's Headquarters we estimate at not less than Rs. 40,00,000, including a reserve for working capital, maintenance and the promotion of national developments.

22. The Queen Mary Technical School for Disabled Indian Soldiers, a very substantially built establishment, erected between 1931 and 1939, cost Rs. 2,44,000, with accommodation for one hundred soldiers.

23. The Madras Association's Victory Memorial Blind School and Workshops at Poonamalle has a present roll of eighty-eight adults and children. It began its work in 1930, acquiring land and barracks from the Army for Rs. 1,50,000. Apart from general contributions, the government gave Rs. 2,00,000 and the Victory Memorial Fund Committee gave Rs. 2,00,000. The present buildings are roomy enough for two hundred more adults and children.

CHAPTER XVIII.—A BLIND PERSONS ACT FOR INDIA

1. Community Responsibility.—In most western countries the pioneer work of voluntary effort has in due course brought the public and the government to the logical conclusion that the welfare of the blind is a community responsibility, that blind children are as much entitled to State education as seeing children, that State provision should be made for the support of the unemployable blind, and so on. This stage has usually been marked by government initiating a comprehensive enquiry into the welfare of the blind in all its aspects, such as that we are now engaged upon here in India. Recommendations are made and a plan prepared for the future.

2. English Blind Persons Act.—In 1920, following such an enquiry, the Parliament of Great Britain passed the Blind Persons Act, which has since been amended and considerably widened in its scope. It charges local authorities with the responsibility for the education, employment, welfare and maintenance of the blind of their areas, the cost to be met partly from rates and partly by the Government from the centre, augmented from voluntary sources. In 1940-41, in England and Wales, the Government's share was estimated at £1,603,600 and the Local Authorities' at £2,185,212, while voluntary contributions amounted to £809,000. It is the *Magna Charta* of the Blind, and is a model which can well be followed in other lands.

3. Modified Blind Persons Act for India.—It has been suggested from many quarters that similar legislation should be enacted in India. This should be done, either by the Central Government under Section 103 of the Government of India Act 1935, with the consent of the Provincial Governments, or by the individual Provincial and State Governments. Its provisions at this stage, however, must be of a considerably modified character as compared with the British Act, though the latter will provide a basis for later amendment and widening of scope. The development of blind welfare services by voluntary effort, as well as the whole structure of social service, was much further ahead in Britain in 1920, when the Blind Persons Act was passed, than it is in India today.

4. Views in Post-War Education Report.—The Report of the Central Advisory Board of Education on "Post-War Educational Development in India" (January, 1944), speaking of the vast problem of blindness, says, "The Board have urged that comprehensive legislation in the general interests of the blind should be promoted on the lines of the Blind Persons Act in Great Britain. Such legislation should ensure, among other measures, the compulsory education of blind children, as well as facilities for vocational training to provide employment for the employable blind and financial help for those who cannot be made self-supporting. . . . Apart from training facilities for the blind, there also should be in every area an after-care department to place those trained in jobs, as well as a research bureau to investigate improved methods of training and new avenues of employment. Special training institutions will also be necessary for training teachers for blind schools. While the schools, with their medical services will do all they can to train and place the blind in life, there are

numerous other aspects of the problem, *e.g.*, the prevention of blindness, the education of public opinion, begging, etc., which can only be tackled effectively by an All-India Society with the sanction of the State behind it”.

5. The Report also observes, “It is true that in other countries blind welfare work has been pioneered by private philanthropy and the State has come in when private enterprise has already made appreciable progress. This country, however, has waited long enough and the time has arrived when the State should take up the education of handicapped children as a necessary part of the general scheme, though it will no doubt at all times encourage and welcome voluntary assistance”.

6. Speaking of the costs of services to the blind, particularly of education, the Report declares, “It may be asked whether a country like India could or should afford the money for such schools, the return for which may not be proportional to the expenditure involved. The answer is that in a national system intended to satisfy the needs of all, it is difficult to ignore the claims of those who are unfortunate through no fault of their own. Moreover, the money spent in educating them may prove a profitable investment in view of the fact that many of the handicapped, at the end of their training, may be saved from becoming a burden either on private charity or on the State”.

7. Measures Recommended for an Indian Blind Persons Act.—We recommend a simple Blind Persons Act containing measures which will pave the way for a comprehensive system which should develop in step with the advance in other social services. The provisions we outline below are of a direct practical character. Combined with the other provisions we have recommended in this report, they will enable the Indian Council to advance stage by stage and steadily deal with the three major sections of the blind community—the young blind, the capable adult blind and the aged and invalid. These measures should include the following :—

(a) To provide for the compulsory education of blind children over the age of 5 years and under the age of 17 years, as soon as schools are ready to receive them, if this is not provided for in an Education Act.

(b) To prohibit blind children begging or being used for begging purposes.

(c) To prohibit begging by all blind persons as soon as alternative provisions are available for their maintenance.

(d) As a first step towards a pension for the blind, as an encouragement to blind people to develop their own capacity and as a compensation for lower earning power, the State to provide a subsidy on earnings or an individual allowance to all blind people in regular employment.

(e) No person or body to establish or conduct any organisation to give blind welfare services without being granted a licence by Government.

(f) No person or body to issue an appeal or to collect funds for blind welfare purposes without being granted a licence by Government.

(g) All schools, workshops, hostels, homes or other establishments giving service to the blind to be open to inspection by Government officers and their accounts to be audited and published.

8. The three immediate basic needs in blind welfare may be met as follows :—

(a) *The School-Age Blind.*—By the provision, in the ordinary education system, of adequate special schools for the blind, with or without assistance from voluntary effort.

(b) *Employable Adults.*—By vocational training and permanent employment in sheltered workshops run by voluntary societies with State assistance, and by individual allowances paid by the State to the workers as augmentation of wages.

(c) *Unemployable Blind.*—By the provision of a number of homes where they will be maintained, the cost to be met by the State plus voluntary effort. Ultimately the care of the aged and invalid blind will become primarily part of whatever social security system is established for all classes of aged, invalid and unemployable persons. In the meantime, however, the Indian Council, in playing its part in the solution of the beggar problem, must be in a position to take charge of the destitute unemployable blind who are not provided for under the joint family system. The Council will be better qualified than other public authorities to judge who are employable and who are not, and, being expert in caring for the blind, will be able to give them happier living conditions.

CHAPTER XIX.—SUMMARY AND RECOMMENDATIONS

Chapter I.—Introductory

The blind have been familiar members of the community since time immemorial, a few securing slight occupation, but for the most part being taken care of under the Indian family system, or by being given alms. Mostly they have been treated with kindness, but given no place in the community nor any interest to relieve the monotony and misery of their lives. (Para. 1.)

Modern strides in medicine and mechanical invention have made it possible both to reduce greatly the numbers of the blind and to give a life of usefulness and interest to those whose loss of sight cannot be averted. The purpose of the report is to set out the measures by which these two objectives can be brought about. (Para. 2.)

In India, modern welfare began in 1887, and pioneer efforts have followed. In its sphere, medicine has already done much in treating eye diseases and in reducing blindness; but in both fields scarcely the fringes of the work have been touched. (Para. 3.)

Government and public are exercised in mind over the extent of blindness, and the lack of practical means to deal with it, and are anxious to have a clear plan. (Para. 4.)

The need for a plan, too, has been felt by the isolated societies for the blind, and by friends of the Indian blind in England. (Paras. 5, 6 and 7.)

The blinding of men of Indian forces on war service has further stimulated interest, and this interest is likely to give rise to big advances in blind welfare in this country, similar to those which followed the loss of sight by so many young men in the West in the last war. (Paras. 8 and 9.)

In view of this feeling, the Department of Education, Health and Lands of the Government of India, in January, 1943, appointed Lieut.-Colonel Sir Clutha Mackenzie "to investigate the extent of blindness in India and its cause and to carry out a survey of the existing societies for the education of blind children and of the means of employing trained blind men and women in sheltered industries, and to prepare a scheme for the creation of a National Organisation for the Blind of India." (Para. 10.)

He submitted an interim Report in April, 1943, for presentation to the Central Advisory Board of Health, which, together with the Central Advisory Board of Education, set up a Special Joint Committee on Blindness "to examine the subject with special reference to the causes and prevention of blindness in India and to Sir Clutha Mackenzie's recommendations and their practicability." (Paras. 15 to 18.)

The structure of the report falls into two major sections: (a) the Causes, Prevention and Treatment of Blindness; and (b) The Welfare of the Blind in all its branches. The greater the service given in the field of prevention and treatment, the less need there will be for welfare services to the blind, with corresponding lower costs. (Para. 25.)

Chapter II.—The History of Blind Welfare in the West

The League of Nations Report on Blindness, 1929, shows how similar our task in India is to the one with which the West has had to wrestle. (Para. 1.)

In olden days, the blind were generally regarded as incapable of participating in the ordinary activities of life and were left to depend on begging for their existence. (Para. 2.)

In 1784 the first school specifically for the blind was opened in Paris; the earliest school in England followed in 1791, and in America in 1832. (Para. 5.)

Schools for the blind found great difficulty in securing employment for their old pupils, and it became necessary for them to build their own workshops to assure their pupils of occupation when their training was complete. (Para. 6.)

The 19th century saw the establishment of many great institutions for the blind, and those who were able to secure admission were well cared for; but the care of the much larger number outside the institutions left much to be desired. The invention of suitable embossed types and the publication of books led to the formation of societies which visited blind people in their homes to instruct them in reading. These

societies, in the 20th century, grew into bodies, which, supported by government grants, taught home occupations and established other services. The passing of the Blind Persons Act in Britain in 1920 placed on local authorities the duty of providing for the welfare of the blind in their areas. These developments have resulted in the whole country being covered with a network of societies, so that, wherever a blind person lives, there is some specific organisation responsible for his welfare. (Para. 7.)

Voluntary effort was responsible for the beginnings and early development of blind welfare, but governmental action was steadily increasing, and gradually in many countries the education of the blind has become a part of the general State educational system, and education of blind children made compulsory. (Para. 8.)

Blind adults receive State assistance in various ways. Pensions for blind people have been granted in a number of countries. In others, they benefit under the poor law, old age pensions schemes, invalidity and disablement insurance, workmen's compensation, etc. In addition to help under these heads, the State usually subsidises the varied efforts of voluntary societies. (Para. 9.)

Since the last war, governmental assumption of, or sharing in, responsibility for blind welfare has rapidly extended. In Britain, the Blind Persons Act has been amended and extended; and under its impetus the position of the whole blind community has been further substantially improved. The point has now been reached where blind welfare is likely to be built into the fabric of a general social security scheme, but it is hoped to preserve to the blind the great virtues of the old voluntary system. (Para. 10.)

Chapter III.—Extent of Blindness in India

The Census figures of 1931 remain the latest statistical survey. (Para. 1.)

No great reliance can be placed on census returns of blindness. Even the Census Commissioner himself had doubts as to their accuracy. The following figures taken from the six most recent censuses show how approximate the figures must have been. The Census of 1881 has an incidence of 229 per 100,000; 1891, 167; 1901, 121; 1911, 142; 1921, 152; 1931, 172. Actually it is probable that blindness is not on the increase, and a leading authority, Sir Henry Holland, has given it as his distinct impression, that with the spread of western medicine, the increase in the number of dispensaries and eye clinics and more uniform vaccination of the population there is a decrease in the ratio of blindness. (paras. 4-6.)

Finally accurate figures of blindness are seldom obtainable until some monetary assistance becomes payable to the blind. Then the tendency is for all to register, including those with some degree of vision, but who qualify under the definition of blindness. If the Indian Census continues to enumerate blindness, the apparent total of blind cases would be almost certain to show a steady increase for many decades, though the actual number would be growing smaller. This would make it impossible to trace the real change in the blind population, or the reduction in blindness being achieved by curative and preventive measures. (Paras. 7 and 8.)

The general experience throughout the world is that census returns underestimate blindness. (Para. 9.)

Limited surveys made in Bengal, Bombay and the United Provinces show a much higher incidence than the Census for the same area. (Para. 12.)

After careful consideration, we estimate that the probable ratio of the totally blind in India is 250 per 100,000, with a similar ratio of partially blind in need of welfare services, giving a total ratio of 500 per 100,000; that is, a blind population of 2,000,000. (Paras. 15 and 16.)

Conclusions and Recommendations

(a) We estimate the blind population of India to be 2,000,000.

(b) While census enumeration of the blind has limited value in including such data as the age incidence of blindness, we agree that the experience in India, as in other countries, is that returns of this kind are inaccurate and unsatisfactory.

(c) We recommend that, in the meanwhile, Provincial Governments should arrive at estimates of the blind population by sample surveys carried out by qualified medical men. In these surveys Blind Welfare Workers, as and when available, may profitably be associated.

(d) We recommend that registration of blind persons should be carried out by qualified medical officers in co-operation with Blind Welfare Officers and local authorities, as soon as this can be done.

(e) We recommend that, in the meantime, for practical purposes, the definition of blindness best suited to Indian conditions is that a person is blind who cannot count the fingers of a hand held up at a yard's distance; and that, as more precise definitions become necessary, the British standards should be adopted. (Paras. 17—23.)

Chapter IV.—Causes of Blindness

The specific causes vary from province to province, influenced mainly by climate, diet and the living conditions of the people. Blindness reaches its peak in the northern and north-western plains, where relentless sun puts the greatest strain on the eye and its mechanism. The more humid areas of the coast show much less eye trouble. (Para. 1.)

The Committee regards the following as the major factors in the causation of blindness, in the order of their importance :—

(1) Inflammatory diseases of the conjunctiva and cornea due, among other causes, to the effects of irritants applied in ignorance to the eye.

(2) Cataract and glaucoma.

(3) Malnutrition.

(4) Venereal diseases.

(5) Small-pox.

(6) Pernicious activities of couchers and quacks.

(7) The ill-effects of bad posture, glare, bad lighting and badly printed books. (Para. 2.)

In paras. 4—50 the views of various outstanding ophthalmologists, on the relative importance of some of the factors entering into the causation of blindness are set out. This survey throws an interesting light on the geographical distribution of some of these factors.

Conclusions and Recommendations

Most blindness in India has both its direct and its indirect cause. For example :—

Direct Cause

Smallpox
Keratomalacia
Ophthalmia neonatorum
Purulent conjunctivitis.

Indirect Cause

Lack of sufficiently extensive vaccination and re-vaccination.
Lack of adequately balanced diet and low living standards.
Lack of adequately trained midwives.
Ignorance and use of strongly irritant remedies.

In fact, this last indirect cause, *plus* poverty and the attendant low standards of hygiene, sanitation, bad ventilation and malnutrition forms the final major cause. (Para. 52.)

Our attack upon the whole vast incidence of blindness must therefore be two-fold—the medical work of dealing with eye diseases as they occur; and secondly, the vast task of removing the indirect causes. (Para. 53.)

Chapter V.—The Treatment of Eye Diseases

In India, for long decades, a fine body of men has given skilled and devoted service to the treatment of eye diseases. Nevertheless, a huge field for work remains. (Para. 1.)

We urge upon all governments and upon generous people of wealth, the intense need to double and treble existing efforts. There is no branch of medical science in which comparatively cheap and speedy treatment yields such quick, satisfactory and lasting results. Whether we study the balance sheet from the angle of true charity to suffering humanity, or from that of its economic value to the community, there is no field of work more worth while. (Para. 3.)

Paras. 4—12 give a review of existing facilities in the United Provinces and of plans for the future. It presents a somewhat typical picture of the existing stage of eye work in many parts of India.

There is a consensus of opinion that, at the present stage, mobile units are essential to a thorough attack upon eye diseases. Supporters of the mobile unit contend that, however extensive and efficient the permanent eye hospital may be, the villager is still at the stage where the treatment has to be brought to him, but on the other hand Madras and Mysore believe that a widespread system of village dispensaries, acting as outposts and field agents for the permanent eye hospitals and eye wards of district hospitals, can serve the need better than mobile units. (Paras. 13 and 14.)

Paras. 15—26 give the views and descriptions of existing field work by Lieut.-Colonel Kirwan, Colonel T. C. Boyd, Sir Henry Holland and Dr. G. Sachanand.

Comment upon the Eye Fair System is contained in paras. 29—35. It is recommended that their function should be :—

(a) To carry the elementary part of the treatment to the doors of the villagers.

(b) To arrange for serious cases to come to the hospitals without cost to the patient.

(c) To do intensive propaganda for established methods for the prevention of blindness.

Expert opinion believes that service in the villages, whether it be given by travelling dispensaries, by well-equipped field hospitals (not moving too often), or by permanent village dispensaries, should operate on a planned scheme from a district eye hospital as base. (Para. 40.)

Conclusions and Recommendations

(a) This Committee recommends, as a short-term policy, the institution of mobile units where local eye work is not well established. At the same time they advise, as a long-term policy, the establishment of well-equipped ophthalmological departments in all district and sub-divisional headquarters.

(b) The Committee recommends that all mobile units and eye camps should be subject to Government approval by an experienced Ophthalmological Adviser. Such an Adviser should be on the staff of all Administrative Medical Officers. Provincial Governments should take suitable legal action to ensure that, in future, private ophthalmological hospitals satisfy certain essential conditions.

(c) This Committee is not in favour of mass eye camps. If, however, operations are to be performed in such camps, they should be done only if the operating surgeon is prepared to give his personal attention to the cases for ten days following operations, or to provide after-treatment by qualified doctors until the wounds are completely healed. (Paras. 42—44.)

Chapter VI.—The Prevention of Blindness

The prevention of blindness has been dealt with in this report only so far as it applies to the treatment of those who have already acquired one or other of the diseases likely to lead to gravely impaired vision. The far wider and even more vital field of prevention lies in the exclusion of the diseases themselves. This last must be the first line in our attack. (Para. 1.)

Blindness is a close associate of poverty, ignorance, insanitary living conditions and poor and unbalanced diet. Therefore the incidence of blindness must steadily diminish as the standards of the people advance. (Para. 2.)

We can roughly estimate the "weight" of blindness on the scale of "blind years", that is, the number of years spent as blind people by the various age groups; and thus gauge the fields where the effort we expend will yield the greatest results. (Para. 8.)

We find (*vide* calculations given in this chapter), what is not immediately apparent from the Census figures, that quite 30 per cent. of the blind people in India have lost their sight under the age of 21. (Most of it has been lost in the first five years of life.) Add to this the fact that these young people are blind for much the longest period, and we find that in "blind years" they suffer 58.3 per cent. of the real sum total of blindness. (Para. 10.)

The tragedy of it is that the four major diseases causing almost the whole of the loss of sight in this younger group—smallpox, keratomalacia, ophthalmia neonatorum and wrongly treated conjunctivitis—are easily preventable by well-known measures—easy, that is, if the people can be reached and if they will accept precautionary treatment. (Para. 11.)

Blindness from any of these causes in the west is now an extreme rarity. With their departure from the scene here, nearly two-thirds of our blindness would be gone. In both the remaining groups about half to two-thirds will yield to steady attack, leaving the measure of blindness in terms of "blind years" (not the incidence, which takes into account only the number of blind people), about 20 per cent. of its present figure. (Para. 12.)

Conclusions and Recommendations

This Committee considers the following to be the most important measures to be undertaken in the prevention of blindness—primary education, general uplift of the people, vaccination, fly control, improved nutrition, control of venereal diseases, maternity care, and research into the causation of cataract, glaucoma and trachoma. They urge that early action should be taken to institute research into the nature and causation of these three diseases, and that the possibility of obtaining grants from the Indian Research Fund Association, and perhaps from the Rockefeller Foundation, should be investigated. They further advise that due care should be taken in the selection of the types and papers used in the printing of school text books; that an adequate standard of lighting in school buildings should be ensured; and that simple truths regarding cleanliness and care of the eyes, and the harmful effects of applying any substance to healthy eyes, with the mistaken idea of improvement or preservation of sight, should be included in text books for primary and secondary school classes. (Para. 13.)

The Committee has already indicated that it considers that elementary preventive work should be undertaken by Public Health Inspectors, Health Visitors and School Teachers. They should be given instruction on the hygiene and care of the eye, and be allowed to make up simple lotions and instruct the villagers in their use—remedies such as boric lotion, normal saline and castor oil drops are suggested. It also considers that arrangements are necessary to train special blind welfare personnel, who shall be whole-time employees. It considers that arrangements should be made, at an early date, for instruction to be given to Public Health Inspectors, Health Visitors and School Teachers, which instruction should take place at recognised ophthalmological centres. The course of instruction for blind welfare workers in services to the blind, which would be more specialised, would be given at an adequate Blind Welfare Training Centre, and in addition would include a short period at a recognised eye centre, to give some knowledge of the ophthalmological side. (See Appendix D.) (Para. 14.)

The Committee recommends that the offer of the Junior Red Cross Society to continue its blindness prevention work be warmly accepted, and it heartily commends the fine work of the Association for the Prevention of Blindness, Bengal, and similar associations. (Paras. 15 and 16.)

General headway can be assisted from time to time by the enactment of legislation or the making of regulations. It is questionable whether such action is of much assistance prior to the point at which the people can understand and appreciate it, and it is enforceable. Acts, however, prohibiting couching would be of value now. The Government of the Central Provinces has initiated such an Act; and we hope other Provinces and States will follow suit. (Para. 18.)

Chapter VII.—Recommendations Associated with the Prevention and Treatment of blindness

1. Additional Eye Hospitals.—There is urgent need throughout India for additional eye hospitals and eye wards to be attached to general hospitals.

2. Eye Service in Rural Areas.—There is also great need for adequate eye service in rural areas and we recommend that the proved Egyptian plan be taken as a model, though some administrations may prefer to have additional district hospitals with village dispensaries acting as their outposts in sending in hospital cases.

3. Patients' Difficulties.—We would recommend that administrations should take steps to meet the travelling difficulties, costs of food, etc., of poor villagers coming to cities.

4. Eye Fairs.—The Committee feels that while there is plenty of room for their excellent service, they could increase their value by some modification in their methods, particularly by concentrating in the rural areas.

5. Couching.—We strongly urge that governments should take action to prohibit couching.

6. & 7. Propaganda and Social Progress.—We urge wider education of the people through all the known channels, in the care of the eye and commend all steps leading to their social advancement.

8. Special Adviser in Ophthalmology in India and a Proposed Organisation.—In Chapter XVI (para. 16 to end of chapter), we recommend the setting up, at the Centre, of an Indian Council on Blindness, with two main Committees, one of which will be a Committee for the Prevention and Treatment of, and Research into Blindness. We recommend the appointment, in the office of the Director General, Indian Medical Service, of an Adviser in Ophthalmology, who will also act as Secretary to this Committee.

9. Provincial and State Committees and Advisers in Ophthalmology.—Similarly we recommend the establishment of Provincial and State Councils on Blindness, linked up with the Indian Council at the Centre, which in their turn will have their Committees for the Prevention and Treatment of, and Research into Blindness. The task before us requires the appointment by each Provincial Government and by the Governments of the larger Indian States of an Adviser in Ophthalmology, whose duty it will be to lead and maintain the attack upon blindness and eye diseases—preventive measures, treatment, propaganda and so on. It would be the Adviser's work to act as Secretary to his Provincial or State Committee for the Prevention and Treatment of and Research into Blindness.

10. These Committees, linked with the Indian Council, and with their Governments, will carry the main task of implementing the foregoing recommendations and keeping things moving along.

11. The Committees' Functions.—These would be their main functions:—

(a) To carry out vigorous propaganda and education work through all the recognised channels.

(b) To collect funds from the philanthropic public with which to put travelling ophthalmic dispensaries and similar services into operation in districts where they are badly needed.

(c) To negotiate with Governments for the passage of legislation and the taking of other forms of government and municipal action likely to contribute to a reduction in blindness.

12. Merging of existing Societies for the Prevention of Blindness.—It is recommended that the existing voluntary associations for the prevention and relief of blindness should merge into the proposed Indian Council on Blindness and its Provincial and State counterparts.

13. Finance.—An attack upon blindness calls for considerable expenditure, but the cost of prevention is small compared with that of maintaining services to a large blind population and the economic loss which that blindness entails.

14. The Committee stresses that, in the event of the establishment of hospitals or institutions being proposed by generous private individuals, suitable arrangements should also be provided for their endowment.

15. Co-operation between Ophthalmologists and Blind Welfare Workers.—Schools and societies for blind welfare should receive early notification of new cases of blindness. Ophthalmologists and eye hospitals should keep in close touch with blind welfare workers, so that new cases whose useful vision cannot be restored can be passed on for training.

16. A Message to the Public.—The success of the campaign depends on the people of the whole country. Governments cannot succeed unless they have widespread sympathy and support.

Chapter VIII.—Social conditions of the Blind and the problem of Begging

In the past, the great bulk of the blind lived as dependents and beggars. Their treatment in the home and village varied from kindness and care to neglect, harshness and exploitation. The schools for the blind say that blind women and girls are regarded as burdens and are generally neglected and little or nothing is done for them. Marriage is a very rare experience (paras. 1—10).

Begging remains the main means of support. It is in essence the "Social Security System" of past centuries. The various religions enjoin upon their followers to give generously of what they have to the poor, the blind, the crippled and the sick, and they will find favour in God's sight (paras. 11 and 12).

The income of beggars varies considerably—Rs. 5, 15, 30 a month and even more. To poor parents a small blind child is actually an asset, capable of being hired out to professional beggars (para. 13).

No social stigma is attached to blind people begging. The more educated classes of society feel that the blind should be afforded some type of industrial training and in the absence of this, or any other form of support, consider it inevitable that the blind should beg. The charitably disposed will give more readily to the blind than to other types of beggars (paras. 14 and 15).

A number of the schools say that if children come to them before the habit of begging is too ingrained, they can be reclaimed to a normal and useful life (paras. 16 and 17).

Our welfare work of the future must be addressed far more to the training of the newly blind and the young blind, to prevent them turning to begging, rather than in attempting to make successful craftsmen of the present blind beggars (para. 18).

The complete establishment of facilities for training and employment of the blind will not in itself remove the blind beggar. At most, only one quarter of the blind community in any country is employable; most of those losing their sight over forty or forty-five are unemployable. Among the younger blind people, too, there are many who, because of ill-health, additional disability or mental unbalance, have also to be classed in this group (para. 19).

Conclusions and Recommendations

The blind beggar must remain with us until the following major provisions have come into force :—

- (a) Educational and employment facilities for all employable blind people.
- (b) Some augmentation of the earnings of the employable blind in the form of allowances from Government to compensate for their lower earning power as compared with the average sighted worker.

- (c) Pension or sustenance allowance for the unemployable blind (para. 21).

In no part of India has any legislation been enacted to control begging by the blind as such; but measures do exist in certain areas to control or to prohibit begging altogether, or to restrict begging by children and which can, if there is sound reason for it, be applied to such of the blind as beg. (See Appendix F for applicable legislation) (para. 23).

Both the administrators of the law and the public are strongly averse to any interference in begging by the blind until there are adequate alternatives by which they can gain support (paras. 24—26).

Chapter IX.—The Unemployable Blind

The full development of facilities for education and employment still leaves at least three-quarters of the blind population in need of assistance. Their needs are two—provision for their maintenance and facilities for their social interest (para. 1).

In the modern State, money allowances are available to the unemployable blind under one or other of several heads (para. 2).

The present trend is towards increasing government pension schemes or social security systems for the permanent maintenance of those who cannot earn for themselves. This assistance is now granted as a right and carries none of the reproach which once characterised it. When similar provisions are made in India, the unemployable blind should be among the first to benefit (para. 3).

Conclusions and Recommendations

In the meantime preliminary steps can be taken. Homes are proposed for street beggars where they will be taught trades, but almost all will be found unemployable. Nevertheless, the blind beggar is a *bona fide* one and deserves better than to be herded into homes with all kinds of riff-raff (para. 4).

The Indian Council should provide homes for these and other unemployable blind, public funds meeting the cost of maintenance. It should be made the agent of governments and municipalities for this work, for which it is better qualified than public authorities. Only suitable, respectable people should be admitted to the homes; criminals and those who are otherwise unpleasant should be left to homes for the destitute (paras. 5 and 6).

The unemployable blind also need interests to fill their time. A number of societies, libraries and homes have classes for the middle-aged and elderly newly blind, where they learn Braille, typewriting, games and light handwork (para. 7).

Many home teachers and home visitors work among them in their private houses, and in some countries this service is part of the blind welfare system. Many societies distribute free radio sets, Braille watches, etc., most of them organise entertainments, while others establish clubs where the blind can go if they wish (para. 8).

Chapter X.—Pensions and Public Assistance

The acceptance of the principle that it is the duty of Government to compensate the blind for their lost earning power has spread rapidly in recent years. The Dominions, Great Britain, several European countries and a number of the American States grant pensions and/or other forms of assistance. Where there is no such direct provision, the care of the destitute blind is usually a charge upon local communes or cantons under Poor Law provisions. Once public assistance of this kind has been granted, subsequent amendments invariably make the terms more generous (para. 1).

The presence of blind beggars in the streets has come to be regarded as a reproach both to the community and to public authority; when all the destitute are properly provided for, citizens will take a greater pride in their community (para. 2).

Nowadays, assistance to the blind is being removed from the "poor relief" type of charity, and placed in the category of a merited income to maintain them in modest comfort (para. 3).

Earlier pensions suffered from many restrictions, one type of which was extremely harmful. It reduced the amount of public assistance by whatever sum a blind man earned by his own efforts, thus encouraging deceit and discouraging effort. This is being remedied by giving assistance to the employable blind mainly in the form of augmentation of earnings, or by granting the same basic rate of pension to all blind persons with an additional subsidy on earnings (para. 4).

Care has to be used in determining who is, and who is not, blind. Many people who are not entitled to assistance try to qualify for it (para. 5).

The League of Nations Report says that where the move for the granting of blind pensions has come from workers for the blind, it has led to less abuse and fewer difficulties than when blind men have themselves led political agitation for this purpose (para. 6).

Conclusions and Recommendations

Though it is hard to estimate the cost of pensions to the public purse, it will appeal to all that a pension by right is the logical and equitable development (para. 7).

Years may pass before wide pension schemes come into force in India. When they do, or should assistance be given by municipalities or other bodies, we recommend that the foregoing principles should be adhered to (para. 8).

Pending the coming of a general provision, assistance should be in the form of *per capita* payments by governments to accredited societies for the blind, for services rendered to the different groups of blind people (para. 9).

Such help will solve the major difficulties of schools, workshops and homes for the blind, assist the schools in getting pupils and gradually build up a system which can be merged ultimately into a broad social security plan (paras. 10 and 11).

Chapter XI.—Existing Schools and Societies for the Blind and their Difficulties

There are thirty-two schools and societies for the blind in India ; they are giving service to 704 boys, 180 girls and 328 adults (total 1,212). They have additional accommodation available for a further 553 children and 422 adults, but this accommodation is not at present being used.

Most of the schools receive a small measure of Government and/or municipal aid. No schools have been established in Assam, Orissa, North West Frontier Province or Baluchistan (paras. 1 and 2).

The schools have been severely handicapped by lack of money, apathy on the part of the public and inadequate staff and equipment. Though they have effected but little change in the life of the mass of the blind, they have shown that our blind people are as apt pupils and keen learners as those of other countries (para. 12).

Taking the blind population as two million, 1,212 enrolled pupils and adults represent only .0606 per cent.—an infinitesimal figure (para. 13).

Because of their ignorance and poverty, as well as the fact that begging offers an immediate reward, parents have shown reluctance to send their children for training. Few schools can point to a substantial number of old pupils in steady remunerative employment (para. 14).

It has not, indeed, been possible to find outlets for *ex*-pupils in the ordinary community and schools are strongly of the opinion that the lack of workshops of their own is a serious handicap (paras. 17 to 21).

Education should be keyed in with the general life of India (para. 22).

Chapter XII.—Principles and Policy of Education in India

Education of the blind involves not only the scholastic and manual training of children, but training to a new life people losing sight at all ages. Four main groups, call for education :—(a) the pre-school child ; (b) school children ; (c) young adults losing sight after school age ; and (d) men and women who become blind after the ages of forty or forty-five, and who are probably beyond the age at which they can learn a new occupation (para. 1).

The existing schools concern themselves chiefly with group (b). The care of group (a) should come into being as a subsidiary activity of the schools, while the education of group (c) will be associated mainly with the adult workshops when they are established (para. 2).

Education and vocational training by themselves will not, particularly at our present stage in India, enable a blind person to earn his living. It is extremely difficult to secure employment after training. Those who found schools for the blind require to face the responsibility of assuring subsequent employment for their trainees (para. 3).

The earlier a beginning is made with the training of the blind after their loss of sight, the quicker and more satisfactory will be the results. Otherwise habits are formed which become hard to break. The properly cared for blind baby has a much greater chance than its neglected brother or sister (paras. 4 and 5).

The younger blind rapidly develop a sixth sense—the sense of the presence of obstacles. The blind child unconsciously makes use of this sense as well as the sounds, smells, breezes, sun and shadow and other familiar associates of home, garden and street, to give him information and guidance (paras. 6 and 7).

The proper care of the pre-school child is secured by visits from a voluntary worker or home teacher to give practical instruction. Where the home conditions are too bad, the proper course is for the child to be taken into a special home for blind babies (paras. 8—10).

The blind child is in search of knowledge and occupation to fill the dark days and in his training the ordinary principles of education apply. Morals have to be watched as in other schools (para. 11).

Conclusions and Recommendations

What we would urge is a simple curriculum aimed at a practical objective. The time table is apt to degenerate into a jumble of too many subjects. Another tendency is to yield to the temptation to allow unimpressive and unsuitable types of boys to drag on to matriculation and university, who can never hope to make their way in

the world afterwards. We recommend mainly a simple elementary education to fit them to be skilled craftsmen in a workshop for the adult blind. The existing schools are unanimous that day attendance is unsatisfactory (paras. 12 and 13).

It should not be thought that the task of training normal blind people presents many difficulties. Any intelligent teacher, given a lead by a competent head, can acquire in a few weeks the special technique the training of the blind calls for. The normal blind present no educational problem; taught intelligently, they respond excellently and, given a real goal at the end of their training, they will remain easy and satisfactory pupils. They are at present discouraged by the number of old pupils who have had to join the ranks of the beggars (paras. 17, 19 and 21).

There are special schools in England for both boys and girls of upper and middle class families; similar schools are recommended here, when and where they can be organised (para. 22).

Mentally defective and backward blind children have a special claim for consideration as soon as the normal blind have been firmly established. Many of them respond to training and can be employed in sheltered industry. The definitely feeble-minded should not be placed alongside normal children. Some blind children, who may appear to be feeble-minded, are, in fact, only cases of serious mental retardation; they should not be placed among the definitely mentally defective (paras. 23—25).

The training of deaf-mute blind children calls for long and patient work and the undivided attention of a skilled teacher for each pupil. It is highly specialised and costly, and it is not recommended that it should be embarked upon in India until after facilities for the education and employment of the normal blind have been well established (para. 26).

The Committee considers that, for practical and economical considerations, it is desirable to put primary and middle sections in one unit. Separate schools for boys and girls should be provided wherever numbers permit. At the primary stage, however, as in the case of normal children, mixed classes may have to be retained for economic reasons. In any case, it is considered desirable that from the middle stage onwards there should be separate schools for boys and girls. In the opinion of the Committee, the period of compulsory education of blind children, when this principle is applied, should begin at the age of six and should continue for two years beyond the limit prescribed for seeing children, *i.e.*, to the age of sixteen, with a view to making up the probable education deficiency due to their handicap (para. 14).

In regard to the two major categories of blind children—(a) totally blind (those who are unable to count outstretched fingers of a hand at a distance of one yard), and (b) myopic children (those who, due to deficient eyesight, cannot keep pace with normal children in school work)—the Committee is of opinion that the children in category (a) should receive prior consideration (para. 15).

The Committee feels that the general standard of education in schools for the blind must be raised so that it fits in with the national scheme of education. They are, moreover, strongly of the opinion that, as the education and the welfare of the blind is as much a function of the State as the education of other children, the responsibility must rest primarily with Government (para. 16).

The Committee believes that teachers for schools for the blind should receive the same course of training as the ordinary teachers, together with some supplementary training to fit them specially for their vocation. They should be on the same scale of pay, but possibly with a higher initial salary at the discretion of the appropriate authorities (para. 20).

Modern workshops in India should have a section for the training of young adults (para. 28).

The happiness and usefulness of the older blind man can be tremendously influenced by a variety of services. He can be encouraged to continue as many of his former activities as still lie within his power; and women, too, can still take their full part in household activities and the domestic circle. There is no stage in life at which an adequate society for the blind cannot give the newly blind very great service (paras. 29—32).

We recommend that care should be taken in India to avoid the rivalries between societies for the blind which have delayed the progress of blind welfare in some countries ; and that there should always be close co-operation between schools and employment services (paras. 33 and 34).

Chapter XIII.—Employment

Six main fields of employment have become established in many countries for the various types of qualified blind workers, of which the following two are of the most immediate importance in the Indian field :—

(a) The sheltered workshops where trainees from training departments and schools for the blind find permanent employment.

(b) In independent occupations as ordinary members of the community (para. 1)

The present situation in India, with its thirty-two schools and almost no provision for employment, has been common to the evolution of blind welfare in all countries. The same point was reached in England about 1830-1840, regarding which the League of Nations Report on Blindness says, " The founders of these schools aimed at providing education and training which they hoped would enable blind pupils to pass out of the school and earn their own living. Insurmountable difficulties, however, were experienced in placing the pupils after training and the schools found themselves forced by the logic of events to go a step further and provide workshops for the employment of their old pupils " (para. 5).

Conclusions and Recommendations

The school is the pioneer unit. To it is added a workshop. It is then able to assure its pupils, not only of education, but of permanent work as a logical sequence to that education (para. 6).

In India, we believe the advance to the sheltered workshops stage is the immediate practical step, for the following reasons :—

(a) The vast majority of the blind belong to the poorer and less intelligent section of the community ; and this step offers the most immediate good to the greatest number.

(b) It is the speediest way to create an outlet for the blind sufficiently attractive and remunerative to compete with the old system of begging.

(c) It is the least costly way of meeting the situation.

(d) The school-cum-workshops is the best basic unit from which to branch into the many other fields of employment and blind welfare.

(e) The blind workers will be under proper supervision, ensuring the production and sale of only first-class articles, so essential to the growth of public confidence in the capacities of the blind (para. 7).

The societies are, in fact, themselves well aware of the wisdom of this policy ; and many of them have suggested it (para. 8).

Workers are best paid under a piece-work or bonus system. Of necessity, the quantity of their individual output varies much more than that of sighted workers ; and they differ, too, in energy and willingness to apply themselves (para. 14).

In most modern workshops some compensation is paid to workers to balance limited earning power. It sometimes comes from the societies philanthropic funds, sometimes partly that source and partly from public sources (local rates or government contribution) ; but the trend is steadily towards public authorities assuming complete responsibility for this " augmentation " (para. 16).

In establishing " sheltered workshops ", the most immediate practical step, with the co-operation of each of the existing schools, is to associate with it an effective workshop with the necessary quarters and grounds (para. 22).

The goods produced by any workshop for the blind, or individual blind worker, must be up to standard commercial quality or better and priced at current market prices. Commercial principles of quality, prompt service and costing are essential (para. 23).

When the seeing public has been educated as to the capacities of the blind, the training of the more capable students for carefully chosen independent occupations

should be proceeded with—professions, business, massage, shop-keeping, music journalism, farming and village handicrafts (para. 25).

Great caution has to be shown in selecting these young men and women (para. 26).

Long experience has shown that a society will waste most of the effort and money expended on a young man for such occupations unless his parents, or the society itself, can spend from several hundred to several thousand rupees on launching him on his enterprise. A society, therefore, must have an after-care fund to provide money for these purposes and intelligent after-care officer to seek out openings and to act as adviser and friend (para. 27).

The blind should have the opportunity to take up music, not only as a recreation, but as a profession. Their training should be of a high order, for the public will not employ performers because they are blind, but because they are first class musicians (para. 30).

In India, there are probably places for both the classical artist of outstanding merit and for the popular entertainer (para. 31).

In every large school and workshops there should be ample talent to provide at least one good band (para. 33).

During the past twenty years the placing of blind men and girls in ordinary factories has made steady growth. During this war, helped by labour shortages, substantial numbers of blind workers are employed on war industries (para. 37).

Factory placement is a matter for careful organisation. To be successful, it must be under constant supervision by a "placement officer" acting on behalf of the society for the blind (para. 44).

It offers a big potential field in India when blind welfare work has been further developed (para. 46).

It should be a first principle in all organisations for the blind that, wherever possible, qualified blind men and women should be appointed to the maximum number of posts in the organisation. They must themselves set an example and demonstrate their practical capacity in administrative and other posts (para. 49).

They should be qualified by education and experience, personality, appearance and background, and be able to do the job efficiently. Otherwise, not only will the general performance of the employing society fall, but the good name of the blind will suffer (para. 50).

It is recommended that, where the circumstances are suitable, blind girls and young women should be taught home duties, including some knowledge of hygiene and mothercraft, which may be helpful to village life when they return home (para. 58).

Chapter XIV.—Braille Literature, Talking Books and Library Service

Paras. 1 to 15 trace the history of types for the blind and the evolution of the Braille system. The "battles of the types" in Europe and America are referred to—bitter controversies which seriously delayed the progress of blind education.

It was not until 1932 that a standard English Braille was finally agreed upon between the two major divisions of the English speaking world. An international Braille musical notation had been accepted two years earlier. This achievement in the rational use of Braille is the final triumph of a long history. To us in India the moral of this tardy evolution is that we, here, should apply all our energies, in a spirit of compromise, to designing and accepting a Uniform Code. Academic education in India can take a big step forward only when an All-India Code and an ample supply of Braille works in the various languages come into existence (para. 16).

We are indebted principally to the British and Foreign Bible Society for the adaptation of Braille to non-European languages. In India, at least six different Braille codes have been designed during the past fifty years (para. 17).

This has made it impossible for anything like an adequate supply of Braille literature to be attempted (para. 19).

From 1902 down to the present day, various efforts have been made to bring about uniformity, culminating in the appointment, in 1941, by the Central Advisory Board of Education, of a Uniform Braille Code Committee. It resulted in the designing of an All-India Code. Provincial and State Governments have mostly expressed their approval of the new uniform code and this Committee recommends its early adoption (paras 20—27).

There are two chief sources of production of Braille volumes. Supplies are turned out in substantial quantities in well-run printing houses in Britain and America (para. 28).

The other source is the writing by hand of Braille books by organised bodies of voluntary workers. This service is reserved chiefly for books on special subjects for which the demand is restricted (para. 29).

Unless the system is well organised and high standards of Braille writing maintained, there can be much wasted effort. Efforts in this direction would be controlled by a Central Braille Publications Committee, assisted by a subsidiary committee for each language area (para. 30).

These are usually run in one of three ways :—

(a) As a department of a society for the blind which also gives other branches of service.

(b) As the sole service run by a society for the blind.

(c) As a department of a public library for the citizens, sighted or blind, of a town or county, provided by State, municipality or philanthropic foundation (para. 31).

Library service to the blind is always free and there is also usually no charge for transport costs on Braille books and talking-book records (para. 32).

Private philanthropy, governments and local authorities have contributed generously to the cost. The Government of India accepts Braille publications and talking-book records at reduced postal rates. Braille printing houses are liberally subsidised by governments (para. 33).

An effective Braille printing house is one of the foundations upon which future progress in India must rest. We heartily support the two recommendations of the Indian Uniform Braille Code Committee, 1941.

“VI. To ensure adequate production of suitable literature for the blind, a Central Press with an up-to-date embossing plant and a workshop for manufacturing necessary educational apparatus should be established; and a Central Library to serve all the institutions should also be founded.

“VII. That in order to enable the schools for the blind to adopt the new code and replace their existing stock of literature printed on old lines, the Central and Provincial Governments should provide such financial assistance as the circumstances may demand” (para. 35).

The Committee also notes with satisfaction that the Central Advisory Board of Education strongly recommends the setting up by the Central Government of a Central Press and a library service to serve all institutions in India (para. 36).

Braille literature available today in Indian languages is in reality nil. Almost all the existing books in the possession of the schools are old and badly worn. The whole present scope is so limited, both as to the number of readers and of available books, that we feel no really large-scale sacrifice will be involved by any of the groups in surrendering its vested interests to the achievement of a uniform type and substantial libraries (para. 37).

The talking Book is simply an adaptation of the gramophone to bring literature more readily within reach of the blind. Comparatively few people losing the sight over the age of thirty have a sufficiently keen touch to become fluent Braille readers. When, therefore, in 1934, complete literary works were recorded on gramophone records specially for blind people, they were warmly welcomed (para. 38).

In America, monthly magazines are now published in this form. The machines are issued free or at very low cost. The records are circulated without charge from libraries for the blind (paras. 39 and 40).

The talking-book will not replace Braille. It is complementary to it. Its achievement is to bring wide reading easily within reach of vastly increased numbers of blind people. Nevertheless, the adequate production of Braille should be the first step in India (para. 41).

Chapter XV.—General Points

In the last twenty-five years organisations have sprung up, chiefly in the United States and Germany, for the special purpose of training and supplying guide dogs to

the blind. For one cause or another no more than a tenth of the blind can or wish to make use of them. (para. 1).

Cost would be a great handicap in India ; and, as things are today, it would probably be cheaper for a man to employ a boy to take him to places he cannot find himself. (para. 3).

For blind welfare services to be fully successful, it is essential that the public should give generously of voluntary service. Governments and municipalities can make grants and the public can give liberally from its purse ; but there is still much service which cannot be paid for—the human touch, the kindly act, the helping hand where it is needed. (para. 5).

All registered blind people, by the fact of their blindness, should automatically acquire membership, as it were, of their particular provincial organisation for the blind. (para. 7).

The practice of combining the education and employment of the blind with such activities as the education of deaf-mutes, homes for poor aged and helpless and so on, is to be discouraged. (para. 9).

Such combinations have almost invariably proved unsatisfactory. The blind and deaf-mutes have little in common and rarely agree. (para. 10).

Chapter XVI.—A Proposed Indian Council on Blindness

That our task should be effectively discharged demands a well-founded administration—an All-India body to lead, advise and co-ordinate. (para. 1).

Such bodies have come into being in other countries as a logical evolution. (para. 2).

In India today, we are greatly in need of a central body and this view is widely supported by the existing societies. (para. 3).

The role of the national society is to marshal all the resources of service, money and goodwill offered for the betterment of the blind and to expend them in the way which will give the greatest good to the greatest number. These societies have become semi-official bodies, acting as the trusted agents of both the State and the public. They are the experts to which the major task of blind welfare is delegated. (para. 4).

All pioneering in this field has come from voluntary effort. Only after many years has the State entered the field and then not to displace those doing good work, but to strengthen them, to accept their advice and to give them the wider measure of support State money and State service can render. (para. 5).

Service to the blind is essentially personal and human ; a service such as blind welfare must have freedom if it is to retain its vitality. (paras. 6—8).

The function of the State is that of shouldering the responsibility of ensuring that adequate services to the blind are in force; whether given direct by the State, whether by local authorities, whether by voluntary philanthropic organisations, subsidised or otherwise, or through the everyday activities of private enterprise and trading. (In Appendix I we outline the respective fields we consider best adapted to Government and to voluntary effort). (para. 11).

Alone, the voluntary system is often not rich enough or powerful enough to meet a need ; alone, State action may not be adaptable enough. Working in close co-operation, they can achieve much. (para. 12).

Conclusions and Recommendations

We recommend the setting up of the following organisation :—

(a) At the Centre, a body to be known as the Indian Council on Blindness.

(b) Under the Council there should be two Committees, one dealing with the Prevention and Treatment of, as well as Research into, Blindness and the other dealing with the Welfare of the Blind. (para. 17).

The Council should be the major body, representatives of all geographical areas and other interests and dealing with items of major policy, while the Committees would be charged with the duty of carrying out the specific functions allotted to them. (para. 19).

This structure at the Centre would have its counterparts in the Provinces and principal Indian States, with corresponding Councils and Committees, acting in co-ordination with the Central body and responsible for services within their Provinces and States. (para. 20).

The very special function of the Indian Council on Blindness and its organisation is to act in the several capacities of an advisory council to the Central, Provincial and State Governments, as a clearing house for all matters pertaining to blindness, as the driving force behind effort throughout India, as an executive body, itself administering a number of welfare services, and as the trusted agent of the State, the philanthropic public and the blind people themselves. (para. 21).

We recommend that Government should appoint two officers, an Adviser in Ophthalmology, an Adviser in Blind Welfare, who would act as secretaries to the two main Committees. These officers need not be Government officers before their appointment. The way must be left open to appoint the best men available. Much will depend upon these two men. Their's will be the task of conferring with Governments and workers in the Provinces and States and of initiating the policy this report recommends. (paras. 24 and 25).

The welfare side of the work calls for a substantial headquarters. The site should be roomy enough to give plenty of space for immediate buildings and for later growth. The Committee strongly recommends Dehra Dun as the most suitable site. (para. 26).

Centred here should be the administrative offices, the Central Braille Printing Press and Library, a training centre for blind welfare workers, teachers and workshop managers, a model school, model workshops and other branches. (paras. 27—29).

The Committee recommends that the Adviser in Ophthalmology should be in the office of the Director General, Indian Medical Service, while the work of his Committee should be carried on wherever it is most suitable and in close co-ordination with other research, preventive and treatment work. (para. 32).

The setting-up of the Indian Council on Blindness soon after the presentation of this report should present little difficulty; and we strongly recommend that this step should be taken at an early date. (para. 33).

The Adviser in Blind Welfare and the Adviser in Ophthalmology should be appointed immediately, so that the earlier stages of the work can be begun at once. A wide field of immediate activity lies open to both these officers. (para. 34).

An important early step, particularly on the blind welfare side, is the initiation of a wide appeal to the philanthropic public to raise substantial funds with which to carry out the services which do not fall within the scope of Government activities. We recommend this as a work in which the Department of Information and Broadcasting can render a great public service. (para. 35).

A big appeal has great value in the fact that it helps to educate the public in the capacities of the blind and in the importance of preventing blindness. (para. 37).

Chapter XVII.—The Practical Unit at the Present Stage

CONCLUSIONS AND RECOMMENDATIONS

We would advise the Provincial and State Council on Blindness, in implementing this report, not to hurry into too much diversity of effort, but rather to concentrate on creating the firm foundation on which ultimately all other branches of blind welfare can be built. (para. 1).

This concentration should be upon schools, workshops, Braille libraries and homes for the unemployable blind. Each Provincial and State Council, when it knows what can be counted upon for capital and maintenance purposes, should decide just exactly what number of units it can establish in its area and where they should be located. We would advise the following as the types of units to be established and the field to be covered in the coming period of expansion. (para. 2).

The school should be residential. It should have a site and the buildings be designed to accommodate ultimately two hundred children. (para. 4).

It will be well for the school to have a nursery department for the care and early training of pre-school children. (para. 5).

For most of the children (those taking up handicrafts), the maximum age for their remaining in school should be about sixteen years. If they are enrolled young enough, this should allow ample time to give them an adequate elementary education of a simple type, a sound grounding in the use of their hands at simple trades and a foundation in music. (para. 6).

At the present stage care should be taken to admit only mentally and physically sound children. (para. 7).

There should be a class for the more advanced education of children of special ability. (para. 8).

The whole lay-out should be of the simplest character, both for economy in cost and also so that the children may not be removed too far from their normal social environment. (para. 9).

The school should be run purely as a school and not as part of a workshop for the adult blind. (para. 10).

Associated with each school, for the employment of its trained pupils, there should be a workshop and probably, in the course of time, several workshops. (para. 11).

If a workshop is established on the same property as a school, it should be quite separate in regard to places of work, residential quarters and grounds. (para. 13).

The workshop should have its own training department to give final training on a commercial basis to the trainees sent on from the school and which will train from the beginning newly blind young men and women, who lose their sight after the age of sixteen, before drafting them into the ordinary working departments. (para. 14)

The Provincial Councils should have branch Braille libraries, in association with the central library service to be maintained by the Indian Council on Blindness. (para. 17).

The Councils on Blindness should establish homes for the unemployable blind as outlined in Chapter IX. The homes should be on sites quite separate from both schools and workshops. (para. 18).

While this Committee recommends that the education of blind children should become part and parcel of the State education system, it should also be open to Governments to assist the present schools for the blind, or schools which may hereafter be founded, by subsidies or grants, provided always that the Government is satisfied with the quality of the work done in them. In doing so, Governments would be applying, in the field of blind education, the system of grants-in-aid followed in the education of sighted children. (para. 20).

Chapter XVIII.—A Blind Persons Act for India

In 1920, the Parliament of Great Britain passed the Blind Persons Act, which has since been considerably widened in its scope. It charges local authorities with the responsibility for the blind of their areas, the cost to be met partly from rates and partly by the Government from the centre, augmented by voluntary sources. It is the *Magna Charta* of the Blind and is a model which can well be followed in other lands. (para. 2.)

It has been suggested from many quarters that similar legislation should be enacted in India. Its provisions at this stage, however, must be of a considerably modified character as compared with the British Act, though it will provide a basis for later amendment and widening of scope. (para. 3).

The Report of the Central Advisory Board of Education on "Post-War Educational Development in India" (January 1944), says— "The Board have urged

that comprehensive legislation in the general interests of the blind should be promoted on the lines of the Blind Persons Act in Great Britain. Such legislation should ensure, among other measures, the compulsory education of blind children, as well as facilities for vocational training to provide employment for the employable blind and financial help for those who cannot be made self-supporting. (para. 4).

“The time has arrived when the State should take up the education of handicapped children as a necessary part of the general scheme.” (para. 5).

Conclusions and Recommendations

Combined with the other provisions we have recommended in this report, the following measures will enable the Indian Council to advance stage by stage.

(a) To provide for the compulsory education of blind children over the age of five years and under the age of seventeen years, as soon as schools are ready to receive them, if this is not provided for in an Education Act.

(b) To prohibit blind children begging or being used for begging purposes.

(c) To prohibit begging by all blind persons as soon as alternative provisions are available for their maintenance.

(d) As a first step towards a pension for the blind, as an encouragement to blind people to develop their own capacity and as a compensation for lower earning power, the State to provide a subsidy on earnings or an individual allowance to all blind people in regular employment.

(e) No person or body to establish or conduct any organisation to give blind welfare services without being granted a license by Government.

(f) No person or body to issue an appeal or to collect funds for blind welfare purposes without being granted a license by Government.

(g) All schools, workshops, hostels, homes or other establishments giving service to the blind to be open to inspection by Government officers and their accounts to be audited and published. (para. 7).

The three immediate basic needs in blind welfare may be met as follows :—

(a) The School-Age Blind. By the provision, in the ordinary education system, of adequate special schools for the blind, with or without assistance from voluntary effort.

(b) Employable Adults. By vocational training and permanent employment in sheltered workshops run by voluntary societies with State assistance and by individual allowance paid by the State to the workers as augmentation of wages.

(c) Unemployable Blind. By the provision of a number of homes where they will be maintained, the cost to be met by the State plus voluntary effort. (para. 8).

In presenting this report the Committee wishes to record its deep appreciation of the work done by Lieut.-Colonel Sir Clutha Mackenzie in connection with the preparation of this report.

Sir Clutha spent more than 18 months in surveying the extent of blindness in India, its causes, the conditions under which the blind live, and the existing agencies which are trying to ameliorate the lot of the blind. In the course of his investigations he travelled extensively over the country and made personal enquiries from many people. The result of his labours and enthusiasm was a very remarkable collection of up-to-date facts concerning blindness in India, which formed the basis of the discussions of this Committee and of the report which the Committee now presents.

Without the work of Sir Clutha Mackenzie the report as it stands could not have been produced. Sir Clutha's personal triumph over the disability of being deprived of sight should prove as much an encouragement to blind persons in India as it was an inspiration to his colleagues on this Committee.

(Sd.) JOGENDRA SINGH.
(CHAIRMAN).

„ W. H. S. ARMSTRONG.

„ B. N. BHADURI.

„ C. A. BOZMAN.

„ E. COTTER.

„ U. M. DAUDPOTA.

„ J. N. DUGGAN.

„ J. B. HANCE.

„ H. HOLLAND.

„ A. S. KHAN.

„ E. W. O'G. KIRWAN.

„ G. L. MEHTA.

„ K. KOMAN NAYAR.

„ W. C. PATON.

„ J. SARGENT.

„ SOHAN SINGH.

„ W. G. P. WALL.

„ C. MACKENZIE,
(SECRETARY).

„ D. M. SEN,
(SECRETARY, EDUCATION
SUB-COMMITTEE).

„ D. P. McDONALD,
(SECRETARY, MEDICAL
SUB-COMMITTEE).

APPENDIX A

QUESTIONNAIRE No. 1—EDUCATION AND EMPLOYMENT

(Sent to all existing schools and societies for the blind)

1. Name of your society.
2. When established.
3. Its specific purposes.
4. Capital outlay involved in existing buildings and grounds.
5. Area of ground.
6. Is it owned or leased by the society ?
7. Description of buildings.
8. Number of blind persons. Please supply an analysis showing boys, girls, men, women, sighted staff, blind staff.
9. Give a table showing how the former are occupied—school children, vocational trainees, employed full-time at trades, blind staff, or as blind people provided with a home without employment.
10. What number are residential, and what attend by the day ?
11. (a) What is the total annual cost for the education of each child, taking in overhead costs and all other costs ?
(b) What is the total average cost of a blind adult in your establishment taking in all costs ?
12. What additional numbers can your society handle without adding to its buildings and plant ?
13. What additional numbers could it handle with additions to the existing buildings and plant on the same site ? Attach any plan you may have and outline any possible scheme of expansion.
14. Is your site suitable for expansion ?
15. What particular group, creed and class of adults and children attend your establishment ?
16. Are there considerable numbers of young adults and children in your district who would benefit by education, vocational training and employment who are not now attending ?
17. What difficulties exist in getting them enrolled as pupils ?
18. What caste difficulties are there ?
19. What prejudices exist on the part of parents, relatives or the public ?
20. What percentage of pupils or trainees come for a short time and do not continue or fail to complete their courses ?
21. What are the major causes of their not completing courses ?
22. To what extent is begging a deterrent to their taking education ?
23. What number of your ex-trainees have actually secured employment, other than in your own or any other society for the blind ?
24. What number of ex-trainees are in employment today in work other than in societies for the blind ?
25. What difficulties do you experience in getting your trainees into employment after their training is complete ?
26. To what extent do you think young blind people in India can be trained to go out into independent occupations in the ordinary community ?
27. In what occupations do you think the foregoing can be done ?
28. Do you favour the establishment of workshops for the permanent employment of adult blind people, with or without living quarters for wives and families, as the best solution for the bulk of the young adult blind ?
29. What trades do you think can be satisfactorily followed in such workshops ?
30. Do you think a market could be worked up for the goods made in such workshops ?
31. Do the trained young blind adults make willing and steady workers or do they lack interest and steadiness ?
32. What number of blind staff do you employ, and what are their duties ?
33. How do you rate the quality of your blind staff ? To what extent are they satisfactory and successful ?
34. What recreational facilities have you ? Kindly supply a general description and a list of the indoor games and recreations which you find your blind young adults and children enjoy and are proficient at ?
35. What are your views on the possibilities of bands of blind musicians playing at marriages, ceremonials and parties, being a possible outlet for employment ?
36. What other musical employments do you think there may be ?
37. What do you think of Indian massage as a possible employment ?
38. What other avenues of employment, not yet discussed here, do you think there might be ?
39. What is the position of the trained blind girl in the home ? Can she and does she take an active part in the housework ?
40. Is the attitude of the parents of the young blind helpful towards their training and employment ?
41. What is your society's present income ?
42. What groups of people support your society ?
43. What measures of help do you receive from government or municipality ?
44. What interest does the Educational Department or the Health Department take in your society ?
45. Have you any plans for increasing your income, and if so, what are your plans ?
46. Is your society willing and able to enter into a close association with a properly accredited national Society for the Blind in India ?

QUESTIONNAIRE No. 2.—SOCIAL CONDITIONS AND EDUCATION

Sent out to all existing schools and societies for the blind and to the following social welfare societies :—

- | | |
|--|--|
| 1. The All-India Kashmiri Conference, Lahore. | 11. Harijan Sevak Sangh, Wardha. |
| 2. The All-India Arain Conference (Anjuman Raiyan-i-Hind), Lahore. | 12. Institute of Rural Construction (Vishva-bharti), Sriniketan, Bengal. |
| 3. The All-India Seva Samiti, Allahabad. | 13. Lady Reading Health School, New Delhi. |
| 4. The All-India Village Industries Association, Wardha, C.P. | 14. National Council of Women in India, Dorabshaw Road, Bombay. |
| 5. The American Presbyterian Mission, Punjab. | 15. The Young Men's Christian Association, Calcutta. |
| 6. The Anjuman-i-Himayat-i-Islam, Tibbia College, Lahore. | 16. Poona Seva Sadan Society, Poona. |
| 7. Bratachari Society, Calcutta. | 17. Ramakrishna Mission, Calcutta. |
| 8. Church Missionary Society, Punjab. | 18. Servants of India Society, Poona. |
| 9. Association for Moral and Social Hygiene in India, New Delhi. | 19. Shrimani Gurdwara Prabandhak Committee, Amritsar. |
| 10. Dayanand Salvation Mission, Hoshiarpur, Punjab. | 20. Sir Dorabji Tata Graduate School of Social Work, Bombay. |

1. What actual employments do you know of which blind men and women have filled in Indian towns and villages under the old Indian social order before any influence was brought to bear by societies for the blind ?

2. In order to present the real picture of what being a blind beggar means, and the need for the public gradually to transfer money support from the blind beggar himself to properly run societies which will give blind people a normal, useful, clean life, we should like to have fuller information on this subject and the life actually led by the mass of blind people today. We should be grateful for information on the following points :—

(a) What do you know of the earnings of beggars, both of adults and children ? (The competition of begging is said on all sides to be the big deterrent to attendance at schools for the blind and employment in workshops). Any figures you can give will be useful.

(b) Are many homeless ?

(c) Do you know of any cases of boys having been deliberately blinded to qualify them as beggars ?

(d) Once a boy or man has fallen into begging habits, do you find they will ever settle down properly to routine life under the society ?

(e) Are blind children hired out by their parents to professional beggars, and what payment do the parents receive ?

3. Very little information has been forthcoming about the present position of blind women and girls in their own homes and villages. We should like to know what you can tell us about :—

(a) How are blind women and girls generally regarded and treated in their own homes and villages ?

(b) Are they encouraged by their families to take their part in household work or to help in any way ?

(c) Do they ever marry ?

(d) Do some blind women contribute to their income by selling themselves for men's pleasure ?

(e) Do you think that blind girls, given a course in housework, child welfare, etc., in a school, would be able to hold their own when they return home, and be real help ?

4. Ninety to ninety-five per cent. of children and adults at present in training and employment under societies appear to be residential. This gives rise to the enquiries :—

(a) Do you find day attendance unsatisfactory, and, if so, in what ways ?

(b) If your establishment is almost entirely residential, what advantage is there in being in a town, if that is the case ?

(c) Could your teaching or conducting of schools and workshops for the blind, as a whole, not be better carried out in the country or further away from a built-up area ?

(d) What are your views as to the practicability of wider rural sites for schools and workshops for permanent employment, where many of the jobs of housework, gardening, etc., could be carried out by blind members ?

5. Several societies combine the education and care of blind children and adults with similar services to the deaf and dumb, sometimes other groups of handicapped and aged poor. Few groups have less in common than the blind and the deaf and dumb ; and the practice of having them together in the one establishment has long ago been discarded in most countries as an unhappy arrangement. In India, where there are so many thousands of blind children in need of education, and probably deaf and dumb children too, it would seem better that a society should concentrate on one or the other. Is there a possibility that your society, if it is a combined one, could become entirely a school for the blind ?

6. We would welcome any further general comments you can make on the foregoing, or on any other aspect of blind welfare.

7. **ANNUAL REPORT AND BALANCE SHEET.**—If you have not already included your latest annual report and balance sheet in the material forwarded, we should be greatly obliged if you would kindly let us have these items.

QUESTIONNAIRE No. 3.—TREATMENT OF EYE DISEASES

(Sent to Administrative Medical Officers of Provinces)

1. Medical Superintendents of ophthalmic hospitals, their names
2. Ophthalmologists of special merit in private practice, their names.
3. Medical missionaries specialising in eye work, their names.
4. List of existing societies for the blind ; school medical officers.
5. Ophthalmic hospitals. A list of these with details of beds, number of in and out patients annually treated, average cost of each case.

QUESTIONNAIRE No. 4.—CONTROL OF BEGGING

(Sent to Inspectors General of Police of Provinces and States)

1. Is there legislation in your province controlling begging and the activities of beggars ?
2. Is there any section of such legislation controlling or limiting the activities of blind beggars ?
3. Is there any section of such legislation limiting or controlling the employment of children or blind children begging or being used by adult professional beggars to induce sympathy ?
4. Could you give us some account of the extent of begging by the blind, their earnings by begging, the question as to whether any social stigma is attached to blind people begging ? Any other comment you think may be useful in adding to our general knowledge on the subject.
5. Do you know of the activities of certain unauthorised persons who collect groups of blind people into so-called homes or societies, and on the strength of such supposedly charitable efforts make a good income for themselves ?
6. Do you know to what extent blind children are hired out by their parents to professional beggars, and what payments do the parents receive in return ?
7. Have you any suggestion as to the form legislation should take to deal with blind persons begging ? (My own general view is that begging by the majority of blind adult beggars may have to continue in the absence of any alternative means of support ; but that, as soon as adequate schools and workshops for the blind are available, begging by blind children should be made illegal.)

QUESTIONNAIRE No 5.—BRAILLE PRINTING AND PUBLICATION

(Circulated to the Directors of Public Instruction for the purpose of securing data upon which to prepare plans and estimate costs of establishing a central Braille printing plant and publishing department.)

1. What is the language or languages of the area you serve ?
2. What are the geographical limits of the foregoing area ?
3. What do you estimate is the number of existing active Braille readers ? (It should be noted that active Braille readers does not mean all those who have learnt Braille, as only a proportion continue to read Braille after lessons cease).
4. What is the estimated average number of new Braille readers qualifying in your area each year ?
5. What are your views as to the most essential immediate requirements in Braille publications ? Please consider the following kinds of books, give your views on them and state in what order publication would be most useful :—
 - (a) School text books.
 - (b) Religious works.
 - (c) Magazines in Braille with general informative articles.
 - (d) Books of a generally informative character on Indian history, travel, economics, etc., and works of a similar kind in regard to other countries.
 - (e) Works of fiction and the type of fiction desired. (In some countries there has been a tendency to restrict Braille unduly to pedagogic and old-fashioned standard works, and not to provide a sufficiency of light modern entertaining literature, thrillers detective stories and so on.)
 - (f) Any other type of reading material. (In the course of time, libraries with a good range of all types of literature would be built up. The foregoing questions are directed to discovering immediate needs upon which a Braille printing plant should make a beginning.)
6. What is the present number of titles available in Braille to your language group ? A list of them would be useful.
7. In what Braille code have the works mentioned under question 6 been Brailled ?

APPENDIX B

CONSULTATIONS AND VISITS MADE BY LIEUT. COLONEL SIR CLUTHA MACKENZIE, OFFICER ON SPECIAL DUTY, IN CONNECTION WITH THE FRAMING OF THIS REPORT.

ASSAM.—Visited in December, 1939 and March, 1940. No education of the blind appeared to be in progress. His Excellency the Governor recommended that no visit be paid in November, 1943 owing to war conditions. Consulted by post.

BENGAL.—Visited in December, 1939, March, 1940, January/February and November 1943. Conference of government officers and workers for the blind held at Government House, January 28th, 1943.

School for the Blind, Behala, visited in December, 1939 and consulted in January, 1943. A further invitation extended for personal discussion in November, 1943.

All-India Lighthouse for the Blind, Calcutta, visited and its officers consulted, January and November 1943. Mr. S. C. Roy's lecture course on the Education of the Blind in the University of Calcutta inspected January, 1943.

The All-India Association for the Welfare of the Blind, Calcutta. Officers of this Association were consulted in January and November, 1943.

Lieut.-Colonel E. O'G. Kirwan, C.I.E., I.M.S., officers of the Association for the Prevention of Blindness, Bengal, and other ophthalmologists consulted December, 1939, January and November 1943.

Home for Blind Hill Boys and Men, Kalimpong visited November, 1943.

BIHAR.—Conference of Government officers, ophthalmologists and workers for the blind Patna, November, 20th, 1943.

School for the Blind, Patna inspected March, 1939 and November 1943.

S.P.G. Mission Blind School, Ranchi, visited November, 1943.

UNITED PROVINCES.—Lucknow visited February, 1943 and government officers consulted.

School for the Blind, Allahabad visited March, 1939.

Sharp Memorial School for Blind Girls, Rajpur, Dehra Dun visited February and June, 1943.

DELHI PROVINCE.—Numerous conferences with government officers in New Delhi

Lady Noyce School for the Deaf and Dumb visited January, 1943 and consulted in regard to its parallel problems.

PUNJAB.—Conference of Government officers, ophthalmologists and workers for the blind at Inspector General of Civil Hospitals' office, February, 1943.

Emerson School for the Blind, Lahore, visited February, 1943.

School for Blind Boys, Amritsar visited January, 1939 and February, 1943.

Other consultations in Lahore, April 1943, notably with Sir Henry Holland.

SIND.—Conference of government officers, ophthalmologists and workers for the blind at Government House, Karachi, April, 1943.

Ida Rieu Welfare Association for the Blind, Karachi, visited in February, 1940 and April, 1943.

Dr. G. Sachanand, Medical Officer, Henderson Blind Relief Association consulted in Karachi, April, 1943.

BOMBAY.—Schools for the blind in Bombay inspected on behalf of the Government of Bombay in February, 1940 and report furnished to the Director of Public Instruction, Poona.

The officers of the schools for the blind, (Dadar School for the Blind, The Happy Home for the Blind, The N. S. D. Industrial Home for the Blind, The Victoria Memorial School for the Blind) were consulted again in January, 1943, and also the Educational Adviser to His Excellency the Governor and the Director of Public Instruction.

The Poona School and Home for the Blind, Poona, was visited in January, 1943.

The Queen Mary Technical School for Disabled Indian Soldiers, Kirkee, was visited in December, 1939 and January, 1943, to discuss its experiences in teaching trades to Indian soldiers.

Colonel Sir Jamshedji N. Duggan consulted in Bombay in February, 1940 and January, 1943.

CENTRAL PROVINCES AND BERAR.—Government officers met and Blind School visited in Nagpur, March 1940. Rao Saheb Wamanrao Wadegaonkar and Mr. S. Y. Deshmukh consulted in Nagpur, October, 1943, but it was not found possible to arrange a conference.

MADRAS.—A small conference of government officers and workers for the blind was held in December, 1939, and a visit paid to the Victory Memorial School for the Blind, Poonamallee, at the same time. The Surgeon-General arranged a large conference in Madras on October 29th, 1943, of government officers, ophthalmologists and workers for the blind from various parts of the Presidency, including the principals of the Blind Schools at Rentachintala, Srivilliputtur, Cochin (Kunnamkulam), Poonamallee and Palamcottah. A further conference with the Council of the Madras Association for the Blind was held on November 5th. The Poonamallee School and the C.M.S. Mission Blind School, Palamcottah were also visited.

HYDERABAD, DECCAN.—Conferences took place with government officers, ophthalmologists and workers for the blind in October, 1943; and the School for the Deaf, Dumb and Blind, Hyderabad, and the Home for the Disabled, Secunderabad, were visited.

MYSORE.—A conference of the same type was held in Bangalore in October, 1943, and the School for the Deaf, Dumb and Blind in Mysore City was also visited.

NOT VISITED.—Orissa, N.-W. F. P. and Baluchistan, in which areas little welfare work is in progress, were not visited; nor was it found possible to visit the States of Baroda, Gwalior, Bhawalpur and Bhavnagar, in each of which there is a school for the blind or for the deaf, dumb and blind. Governments and workers in these areas have, however, been consulted by post and warm appreciation is expressed for the full information they have furnished.

APPENDIX C

Table showing numbers of cases of eye diseases treated annually in the major Provinces of India

Province	No. of Districts	Trachoma	Glaucoma	Cataract	Other diseases of the eye
Assam, 1939	15	177	103	914	131,763
Baluchistan, 1940	5	11,959	121	316	56,732
Bengal, 1939	28	17,235	10,564	34,164	465,230
Bihar, 1938	16	26,153	3,188	28,794	487,757
Bombay, 1940	21	20,763	2,687	14,983	266,872
C. P. & Berar, 1939	19	22,636	1,238	4,808	346,032
Madras, 1939	25	44,217	5,590	37,601	1,439,157
N.-W. F. P., 1940	11	90,874	1,614	6,064	258,250
Orissa, 1940	6	2,796	339	1,973	97,168
Punjab, 1939	29	1,531,383	26,464	79,494	2,308,393
Sind, 1937	8	7,049	859	1,371	66,790
U. P., 1939	51	271,858	10,573	39,517	987,274
Total	234	2,047,100	63,340	249,999	6,911,418
Grand Total					9,272,091

APPENDIX D

FUNCTIONS AND QUALIFICATIONS OF BLIND WELFARE OFFICERS

(In amplification of Chapter VI, para. 14 ; Chapter IX, paras. 7 and 8 ; and Chapter XII, paras. 9, 30, 31 and 32)

Blind welfare workers in the broad sense embrace all staff members of organisations giving education, employment and welfare services to the blind. In the more particular sense, a blind welfare worker is a man (or, in most western countries, more often a woman), who is frequent! a blind or partially-blind person, whose task it is to maintain close touch with all the blind peop in his allotted area. He may be called a "blind welfare officer", a "home teacher", "a home visitor", a "field worker", an "after-care worker", or some such title. In properly organised systems, he undergoes a special course of training before being appointed. He works under the direction of the blind welfare organisation of his area, which may be a voluntary, semi-official body, or local authority body. He may himself be a voluntary worker, though most are paid.

His duties are :—

1. To be the link between the blind welfare organisation and the blind of his area, a register of whom is maintained and which he assists in keeping up to date.
2. To see that every blind person is receiving services appropriate to him or her—that pre-school children are properly cared for in their homes or are sent to a "Sunshine" home ; that school-age children are sent to school ; that newly blind employable adults receive proper training ; and that the newly-blind of unemployable type receive such training and such services as contribute greatly to the happiness and comfort of their lives.
3. To teach Braille (and in some countries Moon type reading), and often typewriting to the unemployable blind. To teach them simple home occupations, knitting, basketry, leather-work, etc. (This last sometimes merges into home industry on a commercial scale, the "home workers scheme").
4. To inspire blind women to carry on with their normal household duties and not to regard themselves as helpless ; and in general to encourage the newly blind people in their homes to maintain their old activities, their recreations and their social life.
5. To see, (and many blind welfare societies have funds for these services), that the blind person in his or her home is equipped with a wireless set, a Braille watch, a Talking Book, a typewriter, a Braille writer, tools for home handicrafts and, in the case of a housewife, that she has electric fittings, such as electric stove and vacuum cleaner, in her house. This assistance may include clothing and other relief in destitute cases.
6. To see that the blind person in the home gets adequate Braille or Talking Book library service.
7. To see that the blind person is getting all the monetary assistance available under government, local authority or philanthropic pensions and sustenance schemes for the blind as such, and also whatever they may be entitled to under old age pensions, poor law relief or local religious charities.
8. To see that the blind person enjoys the various generous concessions arranged for the blind in his particular area—free wireless licence, passes on public transport systems, passes to cinemas, etc.
9. To arrange periodic gatherings of the blind people of his area for picnics, teas and musical entertainments.

10. To discourage blind people, whose condition has been ruled as final by a qualified eye specialist, from embarking on long, expensive and disappointing charlatan treatments for the restoration of sight.

11. To use his influence to send all cases, old or new, which appear to need eye treatment to proper eye clinics, hospitals or eye specialists. He will advise against crude and damaging treatments, ignorant practices and delay.

12. He will be the friend, rather than the official. His friendliness, his cheerfulness, his example (if he is blind himself), and his general helpfulness can vastly influence the enjoyment of life of the blind people under his charge when his advice and assistance as a friend will be sought.

It will be appreciated that the better the intelligence and the personality of the blind welfare worker, the more successful he will be. The ground he has to cover in his preliminary training course, may be inferred from the foregoing duties.

APPENDIX E

THE CENTRAL PROVINCES AND BERAR REGULATION OF COUCHING BILL, 1943 A BILL TO PREVENT COUCHING BY UNQUALIFIED PERSONS

Preamble.—Whereas it is expedient to prevent couching by unqualified persons ;

And whereas the Governor of the Central Provinces and Berar has assumed to himself under the Proclamation, dated the 10th November 1939, issued by him under section 93 of the Government of India Act, 1935, all powers vested by or under the said Act in the Provincial Legislature ;

Now, therefore, in exercise of the said powers, the Governor of the Central Provinces and Berar is pleased to make the following Act :—

1. *Short title.*—This Act may be cited as the Central Provinces and Berar Regulation of Couching Act, 1943.

2. *Meaning of registered practitioner.*—In this Act, the expression “ registered practitioner ” shall have the meaning assigned to it in the Central Provinces and Berar Medical Registration Act, 1916 (I of 1916).

3. *Penalty for unlawful couching.*—Whoever, not being a registered practitioner or not possessing a professional qualification entitling him to be registered under the Central Provinces and Berar Medical Registration Act, 1916 (I of 1916), couches or attempts to couch or agrees to couch a person's cataract with or without that person's consent, shall, on conviction, be punishable with imprisonment of either description for a term which may extend to six months or with fine which may extend to one thousand rupees or with both.

4. *Penalty for abetment of offence.*—Whoever abets the commission of an offence under this Act, shall, on conviction, be punishable with the punishment provided for the offence in section 3.

5. *Offence to be cognizable, bailable and compoundable.*—Notwithstanding anything contained in the Code of Criminal Procedure, 1898 (V of 1898), an offence punishable under this Act shall be cognizable and bailable and may be compoundable with the permission of the court.

6. (1) *Jurisdiction of Courts.*—No Court inferior to that of a Magistrate of the second class shall try any offence punishable under this Act.

(2) *Cognizance of offence.*—No Court shall take cognizance of an offence under this Act except on a complaint in writing made by a police officer not below the rank of sub-inspector or by any person or class of persons authorized by the Provincial Government in this behalf within six months of the date on which the offence is alleged to have been committed.

APPENDIX F

LEGISLATION CONTROLLING BEGGING

Replies to Question No. 1 of Questionnaire No. 4. “ Is there legislation in your province controlling begging and the activities of beggars ? ”

Bengal.—“ The legislation extends to Calcutta and Howrah only, *vide* the following Acts :—

- | | |
|---|-------------------------------------|
| (a) Sec. 40(17) | } The Calcutta Sub-urban Police Act |
| Sec. 40A | |
| (b) Sec. 70 | } The Calcutta Police Act, 1866 |
| Sec. 70A | |
| (c) Sec. 22 of the Howrah Offences Act, 1857 (Act XXI of 1857). | |

N.-W. F. P.—“ No such legislation exists. ”

U. P.—“ Section 248 of the United Provinces Municipalities Act, 1916, provides for the control of begging in these Provinces. This section, however, as it stood originally, failed to prevent begging and was amended by United Provinces Municipalities (Amendment) Act, 1942, published on pages 11 and 12 in Part VII-A of United Provinces Gazette, dated April 11, 1942. In addition to the above there are the rules relating to poor houses which have been made under section 248(2) of the Municipalities Act 1916 and are published on pages 339-341 in Part III of the United Provinces Government Gazette dated November 28, 1942. ”

Bombay.—“ There is no enactment in force in this Province, specially directed towards controlling begging or the activities of beggars ; but the following provision exists, which penalises begging under certain circumstances :—

- Section 118 (iv) of the Cantonments Act II of 1924 which punishes a person who ‘ loiters or begs importunately, for alms in the limits of a Cantonment ’.
- Section 61 (2) of the Bombay District Police Act IV of 1890, which, in places to which the section has been applied by the District Magistrate by a notification, punishes a person who ‘ begs importunately for alms, or directs or permits children under his control to beg for alms, or expose or exhibits, with the object of exciting charity, any deformity or disease or any offensive sore or wound in or within sight of any street. ’

- (c) Section 121 of the City of Bombay Police Act IV of 1902, which punishes any person who ' in any street or public place begs, or directs or permits children under his control to beg, or applies for alms, or exposes or exhibits, with the object of obtaining or extorting alms, any sore, wound, deformity or disease ' in Bombay City. "

Orissa.—" No. "

Bihar.—" There is no legislation in Bihar controlling begging and the activities of beggars. "

Madras.—" See Section 71, Clause (xxi) of the Madras City Police Act, 1888, and Section 3, Clause (8) of the Madras Town Nuisance Act, 1889. Apart from these, there is no legislation in force in this Province controlling begging or the activities of beggars. "

Sind.—" There is no specific provision in the legislation against begging in this province. The only provision dealing with begging is contained in the Bombay District Police Act IV of 1890, sub-section 2 of Section 61. "

C. P. & Berar.—" No. "

Civil & Mil. Station, Bangalore.—" Yes, Sections 64, 65 and 65A of Bangalore Municipal Law. "

Punjab.—" Section 151 of the Punjab Municipal Act III of 1911, punishes those persons who beg importunately for alms, or expose or exhibit, with the object of exciting charity any deformity, or disease or any offensive sore or wound. But this section is applicable only to Municipalities. There is also a corresponding provision in the Cantonments Acts II of 1924, viz. Section 118(iv) for the removal of this kind of nuisance. "

Hyderabad.—" Yes, viz., the Hyderabad State Prevention of Beggary Act, 1315 Fasli (1941-42). "

Mysore.—" Government are at present considering the recommendation of the Committee to put down beggary in the State. One item being the Bill by which the Committee purposes to prohibit beggary in the State (*vide* pages 81, 82 and 117 of the Report). "

Baroda.—" There is no legislation in Baroda State controlling begging and the activities of beggars. "

Ajmer-Merwara.—" There is no legislation in this Province controlling begging or the activities of beggars. "

Rampur.—" There is no specific legislation in the Rampur State to control begging and the activities of beggars ; but section 208 of the Rampur Municipality Act of 1934 provides that any person persistently begging in a public place within the Municipal Limits, or any person who, with a view to evoke sympathy and to arouse charitable feelings, exposes or displays any disfigurement of his body, or any disease, or any hideous abscess or injury or wound on his body, is liable to pay a fine which on conviction would not exceed Rs. 20. "

APPENDIX G

COSTS OF BLIND TRAINEES

Replies to Question No. 11 of Questionnaire No. 1.—" What is the total annual cost for the education of each child or adult taking in overhead costs and all other costs ? " The figures, in most cases, apply to 1942.

Name of School	Costs			Remarks
	Rs.	A.	P.	
Lighthouse, Calcutta	500	0	0	
Kalimpong	144	0	0	Principal takes no salary.
Calcutta Blind School, Behala	300	0	0	
Ranchi	120	0	0	Principal takes no salary.
Patna	308	0	0	
Rajpur	264	0	0	
Amritsar Boys	300	0	0	
Lahore	600	0	0	
Karachi	359	0	0	
Bhavanagar	120	0	0	
Dadar School, Bombay	420	0	0	
N. S. D. Industrial Home, Bombay	180	0	0	
Victoria Memorial School, Bombay	276	0	0	
Blind Women's Home, Bombay	360	0	0	
Poona	300	0	0	
Nagpur	168	0	0	
Poonamaleo	102	0	0	For hostel accommodation only.
Palamecottah	240	0	0	
Rentachintala	91	13	0	Branch of a mission.
Mysore	245	0	0	
Cochin	120	0	0	
Allahabad	200	0	0	

APPENDIX H

SHOWING LANGUAGES, NUMBER OF BRAILLE READERS, BRAILLE WORKS AVAILABLE AND BRAILLE CODES USED

School	Language	Estimate of active readers	New pupils qualifying annually	Books available in Braille	Braille code used
Patna	Hindi, Urdu, Bengali.	100	5	68 Hindi and Sanskrit.	Shah.
Ranchi	Hindi, Kurubha (Oraon), Mundari, Ganeolari.	20	7	School books stories and Bible.	Shirreff.
Allahabad	Hindi, Urdu	50	8	None to speak of.	Shirreff.
Sharp Memorial School, Rajpur.	Urdu	50	2	8 works and the Bible.	Shirreff.
St. Dunstan's Hostel for Indian War-Blinded, Dehra Dun.	Instruction only in Roman Urdu and English.	..	..	200 vols. English Braille and Bible in 5 Indian Languages.	English Braille.
Emerson Institute, Lahore.	Urdu	200	5	7	Shirreff.
Amritsar	Punjabi, Hindi.	70	10	75	Shirreff.
Association for the Welfare of the Blind, Lahore.	Estimates a total of 50 active readers in the Punjab and a total of 75 Braille books including school text books in Punjabi, Hindi, Urdu and English.				
School for the Blind, Karachi.	Sindhi	..	..	..	Advani.
Bahawalpur	Urdu	2	..	57	Shirreff.
Dadar School, Bombay.	Marathi	21	2	5 school text books, 6 books of the Bible.	Oriental.
Victoria Memorial School, Bombay.	Gujarati	75 including school pupils.	20-25	Very few . . .	Nilkanthrai.
Poona	Marathi	15	..	Elementary school text books only.	Do.
Nagpur	Marathi, Hindi.	35	4	A few text books.	Do.
Hyderabad, Deccan	Urdu	6	..	A few school and religious text books.	Oriental. Shirreff.
Lutheran Mission, Rentachintala.	Telegu, Urdu	100	5	A few old text books and religious works.	Telegu.
Poonamallee	Tamil	30	6	6 Tamil, 57 English, text books stories and Bible.	Palamecottah.
Cochin	Malayalam	5	2	A few old text books.	Do.
Mysore	Kannada	150	5	20 Kannada, 7 English. School text books, stories and religious works.	Mysore.
Palamecottah	Tamil	Few because no Braille Library.	10	Small number of old text books, pamphlets and religious works.	Palamecottah.

School	Language	Estimate of active readers	New Pupils qualifying annually	Books available in Braille	Braille code used
All-India Light-House for the Blind, Calcutta.	Bengali, but others served.	(Estimates not more than 1,000 readers in India altogether and states they are severely handicapped through lack of Braille literature).			
Baroda	Gujrati, Marathi, Hindi.	5	5	A few school text books only.	Nilkanthrai.
Calcutta Blind School, Behala.	Bengali	100	12	School text books to Matric Standard only.	

APPENDIX I

RESPECTIVE FIELDS OF GOVERNMENT AND VOLUNTARY EFFORT

We may categorise the fields of service best adapted to be directly given by Government or Public Authority and those which are better delegated to a qualified voluntary society, though Government and Public Authorities will probably share in their control and contribute towards the cost.

SERVICES BY GOVERNMENT

- (a) The provision of adequate services for the treatment of eye diseases.
- (b) The making of sample surveys of the incidence of blindness in selected areas throughout India.
- (c) Increasing the vigour and extent of all measures for the prevention of blindness—vaccination and re-vaccination, improvement in the balanced diet of the people in certain areas, improvement in midwifery services, etc.
- (d) Conducting research into the underlying causes and prevention of certain eye diseases, such as trachoma, glaucoma and cataract.
- (e) The education of villagers and the public in general, through such departments as education, health, defence and rural development, in a knowledge of eye diseases and their prevention and in a helpful, constructive attitude towards the education and useful employment of those who remain blind.
- (f) The enactment of legislation in the fields both of prevention and welfare.
- (g) The education of blind children between the ages of 6 and 16 years inclusive.
- (h) The granting of any facilities that exist or may be set up in the nature of a general employment bureau to secure positions for qualified blind persons either in Government or non-Government services.
- (i) The granting of monetary assistance to such pre-school children, adult workers in the Council's workshops and the unemployable blind accommodated in special homes, as come under the jurisdiction of the new organisation.
- (j) The provision of homes for the destitute unemployable blind.
- (k) The printing and publication of Braille books and magazines.
- (l) Organising the purchase by Government and local authorities of all suitable goods of quality that workshops for the blind can supply.
- (m) The paying of a pension to all blind persons over school age, either as a special pension for the blind or as part of a general disability or invalid pension scheme.

SERVICES BY VOLUNTARY EFFORT. (GOVERNMENT AND PUBLIC AUTHORITIES WILL SHARE IN THEIR CONTROL AND MAY GIVE FINANCIAL AID.)

- (a) The provision of eye hospitals, eye wards in general hospitals and mobile or stationary dispensaries. Such activities can be effectively carried out by missions, and societies for the prevention of blindness, subsidised or not by Government and/or public authority.
- Philanthropic organisations from outside India, such as was the case in Egypt, might join with us in a wide attack upon this vast field of preventable blindness.
- (b) Research into the causes of certain eye diseases in co-operation with Government.
- (c) The education of the villager and the general public in the care of the eye and in the welfare of the blind, through such voluntary organisations as the Red Cross, social welfare organisations, Boy Scouts, etc., and through co-opting the generous services of the press, the radio, the cinema, etc.
- (d) Conducting homes for pre-school blind children to ensure their proper care and sound start in life.
- (e) The running of schools as agents for Government where such arrangements may be decided upon.
- (f) The provision of employment for the blind.
- (g) The conduct of after-care services, the organisation of home visitors and the provision of social and recreational activities.
- (h) The provision of wireless sets, typewriters, Braille writers, talking book machines, Braille watches and other equipment, and tools to blind people, who can make good use of them, free or at prices within their range.

- (i) The conduct of Braille and talking book libraries.
- (j) The organisation of the hand transcription of books into Braille by voluntary transcribers as described in Chapter XIV, paras. 29 and 30.
- (k) The provision of homes for the unemployable blind as the agent of Government or local authority, or as a purely philanthropic effort.
- (l) Research into new fields of employment.
- (m) The manufacture of special apparatus for the blind.
- (n) The organising of the sale of goods manufactured by the blind.

THE FIELD OF PRIVATE ENTERPRISE

As has been mentioned, much service is and can be given in the normal everyday paid-for exchange of services, of which probably the largest contribution at the present time is the preservation of sight through the skill of eye specialists and of general practitioners. The time will come when the trained blind will offer their wares in the commercial market; a helpful attitude then on the part of the public will pave the way to their success. The education of the blind children of the well-to-do will require to be organised, though the parents will themselves be able to pay for it.

Both Government and voluntary effort can stimulate the effectiveness of this private enterprise. In this whole range of blind welfare there is no lack of scope for both direct public service and for the full play of voluntary effort and private charity.

APPENDIX J

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